

Success drivers of co-branding: A meta-analysis

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Abstract

While considerable research attention has been given to co-branding (brand alliance), empirical evidence of the success drivers remains fragmented with inconclusive findings. This meta-analysis aims to synthesize the existing research and provide a comprehensive and generalisable set of findings. It integrates data of 197 effect sizes from 37 independent studies reported in 27 articles. The findings reveal that the relationship between the partner brands has a significantly larger impact on the success of co-branding than the individual brand characteristics, and brand image fit is a relatively more important driver than product category fit and brand equity. Moderator analysis indicates that the relative importance of the relationship between brands is generalisable to the type of industry, business and co-branding strategy. This paper advances theoretical understanding in three ways: (a) it increases generalisability of existing studies by investigating the impact of theoretical, contextual, and method-related moderators on the effect sizes, (b) it brings a consensus to the equivocal findings on the importance of success drivers and (c) it identifies the knowledge gaps, and presents a future research agenda. In so doing, the paper guides practitioners by highlighting which factors to be considered and prioritised when forming a brand alliance.

KEYWORDS

brand alliance, co-branding, meta-analysis, success drivers

1 | INTRODUCTION

Brands are the most valuable assets of companies pursuing commercial success (Blackett & Russell, 2000; Keranen et al., 2012). As markets become increasingly competitive and consumers ever more demanding, business managers are seeking out ways of enhancing customer experience and business growth, and are therefore turning to co-branding (Beem, 2010; Besharat & Langan, 2014). By fostering the right connections, business managers adopt a co-branding strategy to complement their current strengths while covering their weaknesses (Nielsen, 2017).

Co-branding, also named brand alliance, is a marketing strategy in which two or more brands are presented simultaneously to the consumer as one product to create a sum of brand assets, that is greater than that of the individual brands (Ahn et al., 2020; Newmeyer et al., 2018; Rao et al., 1999). Co-branding combines the individual brand characteristics of the constituent brands and transfers the associated values of both brands to the created co-branding (Yu et al., 2020). The purpose of forming a co-branding is to create synergies, boost awareness and enhance the value of the brands involved by leveraging each brand through the transfer of associations from one brand to the other and differentiating them

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from the competition (Aaker, 1991; Singh et al., 2016). The number of brand collaborations has significantly increased over the last twenty years with the increasing awareness of the opportunities this strategy presents for growth (Besharat & Langan, 2014; Newmeyer et al., 2014). The practical implication of this promising branding strategy is evident in various industries. Oral-B Braun, Tide Downy and Senseo & Douwe Egberts are familiar marketplace examples in the fast-moving goods industry, while Nike +, Fendi & Fila and J.W. Anderson & Converse are some of the notable co-branding practices in the fashion industry. Reflecting on the importance of the co-branding strategy, Mark Parker, executive chairman of Nike said, 'I firmly believe that our future potential will be based, in large part, on our ability to collaborate with the right partners in the right ways' (Kan, 2015).

Despite these and many other examples of successful co-branding, the strategy comes with challenges that can lead to failure, of which there are numerous examples in practice (Ahn et al., 2020; Singh et al., 2016). A failed brand alliance can result in negative spill-over effects that can harm each partner brand's equity (Lanseng & Olsen, 2012), as exemplified by the co-branding by Swatch and Tiffany & Co. brands. Forbes reported that co-branding has been perceived as the relationship of the decade, born of a desire to come together to grow a luxury watch business (Adams, 2013). However, despite the initial fanfare of a 20-year contract, the brands had an acrimonious split only four years after the launch because of the tepid response that the co-branded luxury watches had received from the consumers (Adams, 2013). What could the two brands have done differently to make this collaboration a success story? Was the failure due to the consumer evaluation of the individual brand characteristics of Swatch and Tiffany & Co, or was it more to do with the relationship between the two brands? In order to mitigate the risks of failure in co-branding, it is important to understand the strategy's success drivers (Singh et al., 2016).

Co-branding's popularity in business practice has been mirrored by substantial growth in the academic research it has attracted over the past 20 years (Besharat & Langan, 2014; Newmeyer et al., 2018). Despite the considerable research attention devoted to co-branding, empirical evidence for the success factors remains fragmented and ambiguous, emphasising different success factors in different contexts (Dalman & Puranam, 2017; Helmig et al., 2008; Newmeyer et al., 2014). Various factors play an important role in consumers' positive evaluation of co-branding (Besharat, 2010; Singh et al., 2016). Some of the success factors that have attracted attention in the co-branding literature are the brand attitude of the partner brands, perceived brand quality, brand equity, brand familiarity, fit between the brands, brand involvement, variety seeking, need for uniqueness, and brand consciousness of the consumer (Baumgarth, 2004; Bouten et al., 2011; Helmig et al., 2008; Mazodier & Merunka, 2014; Moon & Sprott, 2016; Naidoo & Hollebeek, 2016; Simonin & Ruth, 1998; Singh et al., 2014). The debate on the relative importance of these success factors remains unsettled. Contextual and method-related differences could cause these equivocal findings on co-branding evaluation (Yu et al., 2020). Therefore, there are calls

to aggregate all the relevant success factors and analyse their relative importance (Dalman & Puranam, 2017; Helmig et al., 2008; Newmeyer et al., 2014).

These inconclusive findings hinder the development of systematic insight that can help marketers make informed decisions when forming and executing co-branding. This paper discusses a meta-analysis that offers a comprehensive synthesis across studies. Meta-analysis enables researchers to obtain empirical generalisations about a specific effect size across varying theoretical, contextual and methodological conditions, and examine whether and to what extent these conditions affect the focal effect size (Borenstein et al., 2009; Farley et al., 1995). The results reveal that the dyadic relationship between brands is a more important criterion in the evaluation of co-branding than the individual brand characteristics. The author concludes that this is generalisable to type of industry, business and co-branding strategy. Among other things, the findings bring a consensus to the unsettled debate on the relative importance of the specific success factors: brand image fit between partner brands is a more important success driver than product category fit. However, the strength of effect differs based on the industry: the relationship between brands on consumers' attitude toward co-branding is significantly stronger for the non-service sector, whereas individual brand characteristics show a stronger effect in services than in non-service industries. Furthermore, this meta-analysis draws attention to the moderating effect of methodological conditions. For example, the findings reveal that the type of sample used in the studies varies the effect sizes: the effect is significantly stronger in studies with a student sample. By synthesizing the existing studies, this meta-analysis addresses the generalisability issue and offers robust findings that can help advance the understanding of co-branding. Advancing the knowledge about the co-branding success drivers can guide managers on how to effectively allocate their attention and resources to the relevant factors in the execution of their co-branding strategy and increase the return on firms' co-branding investments (Singh, 2016).

By performing a meta-analysis, the author of this paper advances theoretical understanding in three ways: (a) moving the discussion away from individual studies towards one that is generalisable by investigating the impact of theoretical, contextual, and method-related moderators on the effect sizes (b) bringing a consensus to the equivocal findings on the importance of success drivers in the evaluation of co-branding; and (c) identifying the knowledge gaps and presenting an agenda for future studies in the field. Hence, this paper systematically reviews and analyses the co-branding success drivers to provide insight into the following research questions: (a) which factors relate to a successful co-branding outcome?; and (b) what is the effect of the relevant moderators on this relationship?

Having introduced the motivation behind this paper and the intended contributions, the theoretical background and conceptual framework will follow. Then, the paper will continue with the method section, the presentation of the findings, and the theoretical and managerial implications. Finally, the paper will end with the limitations of the study and suggestions for further research.

TABLE 1 Literature review of co-branding success drivers

Brand characteristics	Relative importance: high/medium	Relative importance: low/none
Brand attitude	Baumgarth (2004); Boo (2003); Garcia et al. (2017); James (2006); Helmig et al. (2007); Lafferty (1999); Lafferty et al. (2004); Mazodier and Merunka (2014); Bouten et al. (2011); Simonin and Ruth (1998); Rodrigue and Biswas (2004); Bleijerveld et al. (2015); Ahn et al. (2009)	Senecal et al. (2014); Rodrigue and Biswas (2004); Bouten et al. (2011)
Brand equity	Arnett et al. (2010); Ma et al. (2018)	
Brand familiarity	Lafferty et al. (2004); Naidoo and Hollebeek (2016)	Bouten et al. (2011); Moon and Sprott (2016)
Brand perceived quality		James (2006); Singh et al. (2014)
Brand trust	Naidoo and Hollebeek (2016)	
Relationship between brands	Relative importance: high/medium	Relative importance: low/none
Brand image fit	Simonin and Ruth (1998); Ahn et al. (2009); Helmig et al. (2007); Senecal et al. (2014); Baumgarth (2004); Lafferty et al. (2004); Bouten et al. (2011); Ma et al. (2018)	Singh et al. (2014)
Product category fit	Helmig et al. (2007); Senecal et al. (2014); Yu et al. (2017); Singh et al. (2014); Ashton and Scott (2011); Bouten et al. (2011); Ma et al. (2018); Ahn et al. (2020)	Singh et al. (2014); Ahn et al. (2009); Baumgarth (2004); Lafferty et al. (2004)
Sensory fit	Ahn et al. (2020)	
Consumer related variables	Relative importance: high/medium	Relative importance: low/none
Brand consciousness		Helmig et al. (2007); Mazodier and Merunka (2014)
Brand involvement	Moon and Sprott (2016)	Helmig et al. (2007); Mazodier and Merunka (2014)
Need for uniqueness		Mazodier and Merunka (2014)
Self-congruity		Mazodier and Merunka (2014); Wang et al. (2020)
Variety seeking		Helmig et al. (2007); Mazodier and Merunka (2014)
Dialectical self	Wang et al. (2020)	

2 | LITERATURE REVIEW

The scope of this meta-analysis covers the co-branding strategy where two brands intentionally come together to form one joint product or service in order to enhance the combined assets of the brands. Based on the integration level of the two brands, there are two types of co-branding covered in the literature: ingredient branding and composite branding strategies (Helmig et al., 2008). Ingredient branding, which is also known as vertical co-branding, entails the integration of a branded product (i.e. ingredient) within another brand as a component (Desai et al., 2014; Helmig et al., 2008; Radighieri et al., 2014). Notable marketplace examples of this include Dell with Intel inside, Apple Watches with Hermes leather straps, and McFlurry ice cream with pieces of Oreo cookie. The main motivation behind the use of this strategy is to create differentiation via the ingredient's attributes and hence, enhance brand equity (Desai and Keller, 2002). In horizontal co-branding, a composite multi-branded product or service is formed by more than one producer at the same step in the value chain, for example, Nike + (product of Apple and Nike; Helmig et al., 2008; Naidoo & Hollebeek, 2016). Horizontal co-branding is based on the premise that a co-branded product or service inherits the tangible and intangible attributes of both partnering brands (Singh et al., 2016).

Prior researchers have measured the success of co-branding mostly by the attitude and behaviour intention towards co-branding. Building on the theory of planned behaviour, both attitude and behavioural intentions are accepted as proxies for actual consumer behaviour (Ajzen & Fishbein, 1977). Attitude towards the co-branding entails the judgment and evaluation of the consumers' general feelings about the co-branded product (Garcia et al., 2017; James, 2006; Roswinanto, 2015; Senecal et al., 2014; Simonin & Ruth, 1998) whereas behavioural intention refers to the consumers' intention to purchase the co-branded product (e.g. Helmig et al., 2007; Mazodier & Merunka, 2014; Moon & Sprott, 2016; Rodrigue & Biswas, 2004); intention to recommend it to others (Ho et al., 2017) and willingness to pay (e.g. Rodrigue & Biswas, 2004). Since marketing literature investigates brand attitude and behavioural intention as the success parameters for co-branding practice (e.g. Garcia et al., 2017; Helmig et al., 2008; Simonin & Ruth, 1998), this meta-analysis studies both of these variables as the dependent variables.

Prior studies have not tested the comprehensive set of drivers and have rather focused on specific factors, neglecting the others. For example, some studies have investigated only the relationship between 'fit among partner brands' and the 'evaluation of co-branding' (e.g. Yu et al., 2017), while others have analysed only the relationship between 'partner brand characteristics' and the 'evaluation of

co-branding' (e.g. Rodrigue & Biswas, 2004). The existing literature has studied the impact of a wide range of success factors and has generated a miscellany of contradictory results about their relative importance as shown in Table 1.

For example, Simonin and Ruth (1998) and Ahn et al. (2009) stated that brand fit had the highest impact on attitude and behavioural intentions (i.e. purchase intention), whereas Helmig et al. (2007) found that product fit was more influential on consumer evaluation. Senechal et al. (2014) showed that both product and brand fit were important antecedents of attitude towards co-branding, whereas pre-attitudes towards brands were less influential on co-branding evaluation. On the other hand, Singh et al. (2014) reported that neither product nor brand fit had an impact on consumer evaluation of co-branding, which contrasts with the findings of Simonin and Ruth (1998), Senechal et al. (2014), and Helmig et al. (2007). Ahn et al. (2020) demonstrated the significant influence of sensory fit on co-branding evaluation. Rodrigue and Biswas (2004) did not find any support for the influence of pre-attitudes on the positive attitude towards co-branding. Baumgarth (2004) and Lafferty et al. (2004) reported that co-branding evaluation was positively influenced by brand attitude and brand fit but did not find any support for the influence of product fit. On the other hand, Bouten et al. (2011) showed that product fit, brand fit, and pre-attitude towards brands all had a significant positive impact on the evaluation of co-branding, but that brand familiarity did not. While co-branding has been extensively studied in the last 20 years, there has been no research aggregating all the relevant studies on success drivers (Dalman & Puranam, 2017; Helmig et al., 2008).

3 | OVERVIEW OF THE CONCEPTUAL FRAMEWORK

As a response to brands being perceived as the most valuable assets of companies pursuing commercial success (Blackett & Russell, 2000; Keranen et al., 2012), there has been extensive attention to branding studies in the literature. Despite the increasing academic interest in branding strategies, the extant literature remains fragmented and inconclusive at certain areas, which call for further meta-analysis or literature review. In order to advance the expanding branding literature, several review and meta-analysis studies have been performed on various branding topics such as corporate branding (Melewar et al., 2012), nation branding (Hao et al., 2019), place branding in the tourism industry (Gertner, 2011), branding in B2B (Keranen et al., 2012), branding strategy in the alliance of mass and luxury brands (Kumar et al., 2020), brand personality (Eisend & Stokburger-Sauer, 2013), celebrity endorsement of brands (Knoll & Matthes, 2017), brand extension (Völckner & Sattler, 2006) and co-branding (Besharat & Langan, 2014). Co-branding among other branding strategies has emerged as an attractive strategy that can enhance companies' existing brand equities. The conceptual paper of Besharat and Langan (2014) has summarised the equivocal findings

in the literature, defining the areas of agreement, disagreement and the boundary conditions and has called for forming a consensus in the co-branding domain. This meta-analysis aims to find a resolution on the debate over the success factors of co-branding. Similar to the meta-analysis of Völckner and Sattler (2006) on brand extension strategy, the conceptual framework of this meta-analysis aggregates the success drivers that previous studies have identified as relevant and depicts the relationship between these success drivers and the consumer evaluation of co-branding, while investigating the potential differences under various moderators (Figure 1). The conceptual framework is built on the study of Helmig et al. (2008). Helmig et al., 2008 offer a conceptual review of co-branding literature, while highlighting the need for a meta-analysis that can synthesize the existing inconclusive findings and empirically test the relative importance of these success factors. Helmig et al. (2008) suggest studying the impact of brand characteristics, the relationship between brands and consumer-related variables on the economic outcome of co-branding. This meta-analysis differs from the proposal of Helmig et al. (2008) in two ways: (a) it takes a consumer perspective and studies the impact of these antecedents on consumer evaluation of co-branding (attitude and behavioural intentions), (b) it extends it by identifying the effect of theoretical, contextual and method-related moderators.

The literature review reveals twelve drivers of co-branding success that were proven to be significant in at least one empirical study. Charlton (1996) does not recommend meta-analysis to be used for testing hypotheses, and states that the purpose of a meta-analysis is to obtain a more precise estimate of an effect, which is found in already existing hypotheses-testing studies. Therefore, this meta-analysis aims to synthesise the exiting research and bring a consensus on the inconclusive findings, while showing the dispersion of effect sizes under various moderators. Therefore, the study variables will be presented and defined without specific hypotheses, as done in previous systematic meta-analytical reviews that aimed to offer a consensus on the unsettled debate in the literature (e.g. Rosario et al., 2016). The potentially relevant success drivers that have been examined in at least one study in literature will be explained in detail in the following sections under three main categories: (a) brand characteristics; (b) relational characteristics between brands; and (c) consumer-related characteristic variables (Helmig et al., 2008; Völckner & Sattler, 2006).

3.1 | Brand characteristics

In the conceptual framework, brand characteristics refer to consumer perceived brand attitudes, perceived quality, brand equity, brand familiarity and brand trust for partner brands that form the co-branding (e.g. Baumgarth, 2004; Helmig et al., 2008; James, 2005; Lafferty et al., 2004; Senechal et al., 2014; Simonin & Ruth, 1998). These brand characteristics have been found to be positively correlated with the success of brand extension and co-branding (Helmig et al., 2008; Völckner & Sattler, 2006).

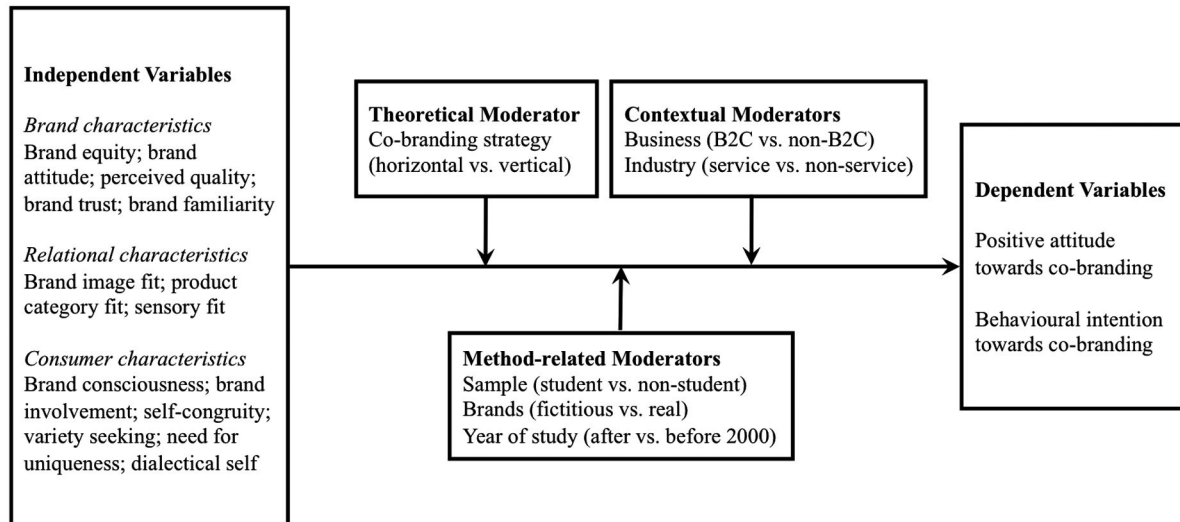


FIGURE 1 The conceptual framework for co-branding success drivers

More specifically, brand attitude, which is the positive or negative judgment or feeling held about a brand, influences consumer brand choice (Haugtvedt et al., 2008). Another assessment criterion of a product is its perceived quality, which is its superiority to the other alternatives (Dickinson & Heath, 2006; Keller, 1993). Similarly, another factor that affects consumer information processing and brand evaluation is brand familiarity, which is the accumulated knowledge about a product (Lafferty et al., 2004; Naidoo & Hollebeek, 2016). Because of the extensive brand-related experience and knowledge, brand familiarity produces trusted cues related to the brands and positively affects purchase intention (Naidoo & Hollebeek, 2016). Moreover, brand trust, which reveals consumers' confidence in the brand to perform its promised function, has been shown to have a positive effect on consumers' purchase intention (Chaudhuri & Holbrook, 2001; Naidoo & Hollebeek, 2016). Brand equity, the value that is driven by consumer perception of the brand, is also studied as one of the success drivers in branding strategies since higher brand equity may positively affect the consumers' decision to buy certain brands over others (Arnett et al., 2010). Brand equity reveals the overall value of a brand, which is mainly a function of consumers' trust and confidence (perceptions) in the brand to deliver the expected performance as well as consumers' willingness to favour (behavioural responses) the brand over competing alternatives (Dutta and Pullig, 2011; Koschate-Fischer et al., 2019; Ma et al., 2018). Existing brand literature conceptualises the consumer-based brand equity as a composite of many consumer perception aspects, such as brand association, brand image, perceived quality, brand familiarity and brand awareness (Aaker, 1991; Keller, 1993), and also incorporates consumer behaviour aspects, such as preferences, loyalty, and purchase intention (Aaker, 1991; Agarwal and Rao, 1996). The researchers in co-branding literature have extensively investigated the impact of one or more aspect of brand equity of partnering brands on co-branding evaluation (Ma et al., 2018; Yu et al., 2020).

Researchers have used information integration theory (Anderson, 1981) to show that the overall co-branding evaluation can be formed

and modified by integrating the prior attitudes and beliefs about the partner brands and that these prior brand attitudes are positively related to the attitude towards the co-branding (Rodrigue & Biswas, 2004; Simonin & Ruth, 1998). Therefore, the individual brand characteristics of partner brands, which cover all the associations, attitudes, and beliefs about the brands, are to some extent related to the evaluation of co-branding.

3.2 | Relational characteristics between brands

'Relationship between brands' in the conceptual framework refers to the relationship characteristics between the partner brands, such as brand image fit and product category fit. Extensive research on brand alliance has focussed on the concept of fit between two brands, because the fit is an important factor in the evaluation of the alliance (Ahn et al., 2009; Bouten et al., 2011; Lafferty et al., 2004; Moon & Sprott, 2016). The fit concept has two dimensions: brand fit and product fit. Both brand fit and product fit refer to the compatibility of the two partner brands in co-branding (Ahn et al., 2020; Dickinson & Heath, 2006). Brand fit is defined as the congruence of consumer perceptions/associations about the brands, whereas product fit captures the consumer perception of the similarity and compatibility between two product categories (Ahn et al., 2020; Bouten et al., 2011; Ma et al., 2018; Senechal et al., 2014; Simonin & Ruth, 1998). While some researchers have demonstrated that the better the products fit, the easier it is for consumers to integrate and transfer their favourable attitudes to the co-branding (Bouten et al., 2011; Helmig et al., 2007), some empirical studies report that consumer evaluation of co-branding is positively influenced by brand image fit in particular (Baumgarth, 2004; Simonin & Ruth, 1998). Ahn et al. (2020) have examined the effectiveness of perceived sensory fit which have not been explored before. Sensory fit refers to the congruence of colour, shape or size of the partner products in a co-branding (Ahn et al., 2020). Congruity theory suggests that consumers seek to sustain

balanced and consistent associations among partners, and choosing the right partner is, therefore, one of the determinants of a successful co-branding; this notion is borne out by the literature (Ahn et al., 2009; Singh et al., 2014). The perceived fit between partner brands plays an important role in the evaluation of co-branding because it reduces the likelihood of a negative outcome from purchasing the co-branded product or service (Ashton & Scott, 2011). Therefore, this meta-analysis studies relationship between brands as a success factor for the evaluation of co-branding.

3.3 | Consumer-related characteristics

'Consumer-related variables' in the conceptual framework refer to consumer-specific characteristics, such as brand consciousness, brand involvement, self-congruity, variety seeking, and need for uniqueness. Prior branding strategies consider consumer-related characteristics to be important explanatory variables (Barone et al., 2000; Czellar, 2003). For example, the brand involvement construct is found to be positively related to the consumer evaluation of co-branding because involvement with the partner brands triggers the appeal of co-branding (Mazodier & Merunka, 2014). Another consumer-related factor that affects the evaluation of co-branding is the brand consciousness of the consumer: brand-conscious consumers can identify brand names and they seek out well-known brands that signal a reduction in risk (signalling theory; Shim & Gehrt, 1996; Spence, 1973). Moreover, self-congruity, which denotes the perceived fit between the brand and the consumers' actual and ideal selves (Aaker, 1999), has been studied as one of the consumer-related variables that are positively related to attitude towards the co-branding (Wang et al., 2020) and purchase intention (Mazodier & Merunka, 2014). Another examined consumer-related variable in the literature is dialectical self, which refers to the degree of cognitive tendency to tolerate the inconsistencies in one's self-concept (Wang et al., 2020). Prior research in branding has investigated variety seeking and the need for uniqueness as consumer-related variables (Helmig et al., 2007; Mazodier & Merunka, 2014). Variety seeking consumers and consumers with a need for uniqueness derives utility from the change itself (Givon, 1984), and these consumers may favour co-branding since they prefer to switch first to alternatives for specific brands rather than switching to completely different brands (Helmig et al., 2007; Mazodier & Merunka, 2014). Based on prior research, this paper posits that consumer-related variables could affect the evaluation of co-branding.

3.4 | Moderators

The objective of having moderators in the conceptual framework is to identify how the relationship between the antecedents and the co-branding outcome differs under the influence of potential moderators. The substantive and methodological characteristics of studies may cause differences in the reported effects (Bijmolt & Pieters, 2001). Identifying such boundary conditions is particularly relevant

when prior literature has produced inconsistent findings (Gonzalez-Mule & Aguinis, 2018). The moderators in this meta-analysis capture the theoretical, contextual, and research method-related differences among the studies, as is common practice in meta-analysis papers in marketing (e.g. Arts et al., 2011; Verbeke et al., 2011).

3.4.1 | Theoretical moderators

Horizontal versus vertical co-branding strategy

A co-branding strategy can be applied horizontally or vertically, depending on how the products are integrated (Helmig et al., 2008). Integration in co-branding refers to the level of the partner brands' connection in form and function (Newmeyer et al., 2014). In studies where the brands are highly intertwined in a form (vertical co-branding), the relational characteristics between the brands may be more important in the evaluation of the co-branding than they are in horizontal co-branding because a mismatch between highly integrated brands may increase the risks of negative outcomes for the co-branding (Ashton & Scott, 2011). Given that the level of integration may have different effects on consumers' evaluation of co-branding (Newmeyer et al., 2014), this meta-analysis examines the moderating role of the type of co-branding strategy.

3.4.2 | Contextual moderators

A co-branding strategy is based on the premise that brands collaborate to generate positive consumer evaluations, including the attitude and behavioural intention towards the co-branding (Besharat & Langan, 2014). The services sector has dynamics that are different from those of the goods sector, and the same applies to B2B versus B2C businesses (Verbeke et al., 2011). Analysing context-related moderators enables researchers to obtain empirical generalisations and assess how these contextual moderators vary the effect sizes (Rosario et al., 2016). As the types of industry and business have been shown to moderate the effect sizes in other marketing meta-analyses (e.g. Hogreve et al., 2017; Palmatier et al., 2006), this paper investigates whether the relative importance of success factors may vary depending on the business and industry settings.

Services versus non-services

Services and non-services (goods) have unique characteristics, which result in differences in the consumer evaluation processes (Zeithaml et al., 2006). In the case of services, the offer is mostly intangible and it is more difficult for consumers to evaluate its quality before experiencing it. On the other hand, in non-service goods, which are usually high in 'search' qualities rather than 'experience' qualities, consumers have the opportunity to be informed about the individual brands prior to the moment of sale (Verbeke et al., 2011). Signalling theory (Spence, 1973) explains the role that brands play in transmitting credible signals of product quality in the field of

marketing (Helm & Ozergin, 2015; McCarthy & Norris, 1999; Rao et al., 1999; Spence, 1973). Consumers benefit from quality cues signalled by brands when they are evaluating attributes of services (Erdem & Swait, 1998; Zeithaml et al., 1985). Brand characteristics may play a more important role in the context of services due to the need to reduce the uncertainty that accompanies an intangible offer (Naidoo & Hollebeek, 2016). Since service and non-service industries have different characteristics that change the consumers' evaluation process, it is relevant to find out how industry type moderates the impact of the success drivers.

B2C versus B2B

The B2B and B2C markets have different dynamics (Hogreve et al., 2017; Verbeke et al., 2011). This paper explores whether the correlation between the drivers and the level of success varies depending on the business setting. Business customers in B2B settings are involved in decision-making processes that are more complex and rational than those of the end-consumer (Manning et al., 2010; Verbeke et al., 2011). Based on information integration theory (Anderson, 1981), people integrate attitudes and beliefs about partner brands to form an evaluation of the co-branding (Rodrigue & Biswas, 2004). The complexity of the decision process for business customers may mean that consumer-related variables might moderate the assessment process differently in B2B versus B2C markets.

3.4.3 | Method-related moderators

Fictitious versus real brands

In some studies, the co-branding product or service is 'real', which means it exists in the market, whereas other studies analyse the success of co-branding with 'fictitious' brands. Both methods have their merits. Researchers use fictitious brands to avoid any brand associations that could bias the participants' evaluations due to previous experience with real brands (Bleijerveld et al., 2015; Geylani et al., 2008; Rao et al., 1999). In contrast, real brands are used so that genuine brand perception change can be activated by exposure to the manipulation (Brady et al., 2008). The evaluation of co-branding may vary based on whether the partner brands are real or fictitious, and it may be that this research method-related moderator varies the effect size.

Sample types

Scholars in social science research have discussed the use of a participant sample entirely made up of students and questioned its representation power of the heterogeneous population (Ashraf & Merunka, 2016; Kardes et al., 2007). Some researchers claim that studies conducted with a student sample may produce larger effect sizes because there is less error variance in measurement due to the homogeneity of student samples (Orsingher et al., 2009; Peterson, 2001). Therefore, the moderating effect of the sample on the effect sizes is explored in this meta-analysis.

Publication date

The year of publication date is often a moderator in meta-analyses performed in the marketing literature (e.g. Bijmolt et al., 2005). The marketing discipline has experienced tremendous change over the last two decades, triggered by changes in the nature of consumers and markets (Kumar, 2005). During this time, the vast number of marketing messages being constantly transmitted means that attracting consumer attention to a new product and service is becoming increasingly challenging (Teixeira, 2014). Therefore, this meta-analysis codes the publication year for all studies as 'before' and 'after' the year 2000 to observe whether the magnitude of the effect size varies over time (Chang & Taylor, 2016).

4 | METHOD

It is important to specify the type of this review paper since each review paper has different purposes and approaches that require them to be evaluated differently. These are structured review focusing on used methods, theories and constructs (e.g. Gilal et al., 2019; Mishra et al., 2020); framework based reviews (e.g. Paul & Benito, 2018); narrative reviews with a framework for setting future research agenda (e.g. Dabić et al., 2020; Kumar et al., 2020) and systematic meta-analytical review to aggregate results from different studies to identify the disagreements, and show the effect sizes that differ in various contexts (e.g. Barari et al., 2020; Rosario et al., 2016). Among all these review methods, this research adopted a systematic meta-analytical review to meet the objective of synthesising existing previous researches on success factors of co-branding to resolve inconsistencies and create a generalised accumulative knowledge on success drivers of co-branding (Paul & Criado, 2020).

4.1 | Data collection

Data collection consists of an elaborate search followed by a screening process with exclusion and inclusion criteria. To identify a population of relevant studies on the evaluation of co-branding, an elaborate search strategy was conducted following the guidelines of Paul and Criado (2020). Qualitative research on co-branding has started to take place at the beginning of the 1990s (e.g. Norris, 1992; Rao & Ruekert, 1994), and the first quantitative research on co-branding (e.g. Park et al., 1996; Shocker, 1995) did not begin before 1995 (Helmig et al., 2008; Singh et al., 2016). Therefore, the search aimed to retrieve all the relevant empirical research on co-branding success drivers during the period 1995–2020. As depicted in Figure 2, keywords (co-branding, ingredient branding and brand alliance) were searched in electronic databases (EBSCO, Science Direct, and Emerald) and ProQuest (ABI/INFORM) to identify respectively published and unpublished studies (e.g. doctoral dissertations, conference proceedings and working papers). The reason for not limiting the data collection to the published studies is to be able to retrieve all the relevant articles and avoid publication bias,

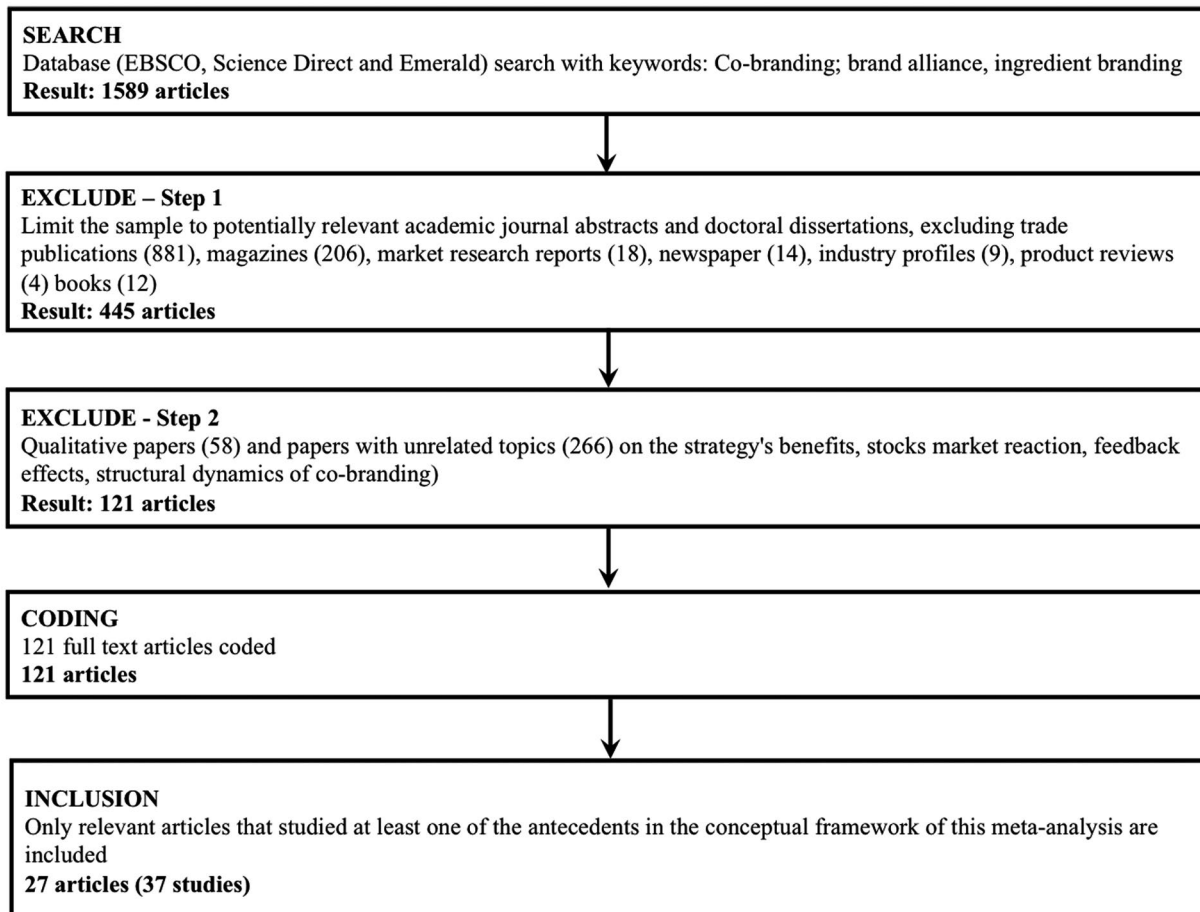


FIGURE 2 Data collection with exclusion and inclusion criteria

which is a potential threat to the validity of the method (Borenstein et al., 2009). Publication bias occurs when the published studies are unrepresentative of the population of all the relevant studies, especially when certain studies with higher effect sizes are more likely to be published than studies that report lower effect sizes (Borenstein et al., 2009). A meta-analysis delivers an accurate synthesis of the studies included in the analysis. The mean effect computed by the meta-analysis reflects a bias if the included studies are a biased sample of all the relevant studies. Rothstein et al. (2005) consider 'publication bias' as a potential threat to the validity of the results. The researchers, therefore, aim to avoid this 'publication bias' by retrieving all the relevant studies including both the published and the unpublished ones (e.g. Blut & Wang, 2020; Hogreve et al., 2017; Rosario et al., 2016; Schmidt & Bijmolt, 2020).

After the elaborate search of the electronic databases, a manual search was undertaken of the leading marketing journals reported in the ABS journal ranking. Finally, snowball sampling was applied by screening the references in the obtained publications for further studies. After completing the search process, a screening process with exclusion and inclusion criteria was applied to restrict the data collection as done in previous meta-analytical reviews (e.g. Barari et al., 2020). The use of such abstract screening criteria is a common approach in meta-analyses (e.g. Knoll & Matthes, 2017; Roschk et al.,

2017). Exclusion of papers was performed at two steps as shown in Figure 2. After these two steps, the non-academic studies, qualitative papers, and the studies that investigated the benefits of the strategy, structural dynamics of forming a co-branding and performance of it from firms' perspective, and the studies that mentioned co-branding but analysed other branding strategies were excluded.

Before applying the inclusion criteria, the remaining 121 full-text papers were read and coded according to the coding manual (Appendix A1). A more detailed assessment of this subsample enabled identifying the papers that are relevant to the conceptual framework of this meta-analysis that aimed to study the success drivers of co-branding. The inclusion criteria were that the article (a) measured consumer evaluation of co-branding, and (b) reported one or more empirical success driver (e.g. brand equity, brand image fit, product category fit) as the antecedents. Despite the existence of a broad range of studies on co-branding in the literature, this systematic meta-analysis has a selective approach and aims to synthesise only the success factors of co-branding to resolve inconsistencies and create a generalised accumulative knowledge on antecedents of co-branding success.

Systematic meta-analytical reviews, unlike narrative reviews, always have an eligibility criterion that consists of inclusion and exclusion steps that are determined before the search is implemented.

It is common to start with a large pool of studies and end up with a much smaller set of studies after the eligibility criterion is applied along with the author's knowledge and judgement (Borenstein et al., 2009; Paul & Criado, 2020).

At the end of this inclusion process, the final sample of this meta-analysis consisted of 37 independent studies from 27 articles that delivered a total of 197 effect sizes ($N = 10,862$). The detailed data collection process with exclusion and inclusion criteria is shown in Figure 2.

4.2 | Data coding

All necessary study characteristics and the effect sizes were coded based on a coding manual (Lipsey & Wilson, 2001; see Appendix A1). The studies were coded in four steps: (a) searching for the antecedents and the outcome relevant to the conceptual framework; (b) searching for the effect sizes and study descriptors; (c) entering all data into an Excel sheet; and (dd) classifying and grouping variables (see Appendix A2). To check for coder reliability, two coders coded four of the articles simultaneously. Having an overall agreement rate of over 90% in these studies implied no significant discrepancies (Verbeke et al., 2011). Coded papers are presented at the end of the paper in Section 8. As in previous meta-analyses, items were merged when the differences between them were not meaningful to meta-analysis purposes such as brand 'fit' and brand 'match up' (Verbeke et al., 2011).

Another reason to merge one or more predictors into a sub-variable is to increase the power of the effect sizes and to yield a more precise estimate of the effect than would be possible with individual studies examining the limited number of variables (Borenstein et al., 2009). In the context of co-branding, there are limited studies examining some of the variables such as brand equity, trust, perceived quality, brand familiarity and trust. Since brand equity, as defined in the literature, is a composite of these variables, they are merged and coded under 'brand equity' to be able to yield a more precise estimate of the effect of brand equity on the success of co-branding. Comparing effects in subgroups can have very low power if there are so few studies examining a specific variable such as brand involvement, variety seeking, self-congruity (Borenstein et al., 2009). Therefore, the variables that are examined in less than five independent studies are dropped and not studied as sub-group variables in this meta-analysis. These variables are only analysed under main categories such as brand characteristics, relational characteristics and consumer-related variables (e.g. sensory fit, dialectical self).

4.3 | Meta-analysis procedures

4.3.1 | Effect-size metric

The studies included in the analysis measured the relationships between antecedents and the outcome variable by means of

correlations. Thus, the correlation was used as the effect-size metric, which is consistent with other meta-analyses in marketing (Arts et al., 2011; Kirca et al., 2005; Palmatier et al., 2006; Rosario et al., 2016; Verbeke et al., 2011). The effect sizes of studies that used regressions or reported standardised beta coefficients (e.g. Bouten et al., 2011; Garcia et al., 2017) were converted into correlations with a formula suggested by Peterson and Brown (2005).

4.3.2 | Random-effects analysis

The random-effects model was adopted (Hunter & Schmidt, 2004). This model assumes that the studies in the meta-analysis are selected from a universe of studies meeting the inclusion criteria and that the effect sizes are a random selection of the effect sizes in the universe (Borenstein et al., 2009). The researcher accumulated data from a series of studies that had been conducted by other researchers, and it would be unlikely that all these studies were functionally equivalent. Because the subjects and interventions in these studies would have differed in ways to change the impact on the results, the researcher should not assume a fixed effect size (Borenstein et al., 2009; Lipsey & Wilson, 2001). Therefore, the researcher adopted a random-effects model for this meta-analysis.

Comprehensive Meta-Analysis Software (CMA) was used to report the key statistics, such as the summary effect, confidence intervals, and measures of heterogeneity (Borenstein et al., 2009). To correct for sampling errors, studies' sample sizes were used as weights, and 95% confidence intervals were constructed to determine the significance of the mean correlations (Borenstein et al., 2009). CMA enabled working with multiple independent variables and two dependent variables.

4.3.3 | Level of analysis

The individual effect sizes were used as the unit of analysis. This was justified by a Q statistics test for heterogeneity, which indicated significant heterogeneity of correlations (Verbeke et al., 2011). Bivariate analysis was used to test the impact of success drivers on the evaluation of co-branding. The existing research was synthesised by calculating the averaged correlations, weighted with sample size, for each independent variable in the conceptual model with the two dependent variables: attitude and behavioural intention.

4.3.4 | Heterogeneity

The researcher analysed the dispersion of effects by calculating the Q-statistic and I-squared test of heterogeneity for each relationship (Borenstein et al., 2009; Hunter & Schmidt, 2004). A heterogeneity

test is performed to see how much the effects vary from study to study, as being a common procedure in meta-analyses (e.g. Arts et al., 2011). A significant Q test requires the rejection of the null hypothesis that the true effect size is precisely the same in all studies and high I-squared values (over 70%) suggest that moderators can explain the difference in true effect sizes (Borenstein et al., 2009). The sum of squared deviations of all effect sizes from the mean effect size gives the Q value, and I-squared values give the proportion of the variance in observed effects (i.e. the variance in the true effects rather than sampling error; Borenstein et al., 2009). When Q value and I-squared values can indicate the presence of heterogeneity and necessity of a moderator analysis, prediction intervals in the moderator analysis will show the extent of the dispersion of true effect sizes under various moderators (Borenstein et al., 2009).

4.3.5 | Moderator analysis

Consistent with other meta-analyses in marketing, the strength of the antecedents and outcome associations may vary with the theoretical, contextual, and research method related moderators (e.g. Palmatier et al., 2006; Roschk et al., 2017). Dummy coding for branding strategy (1 = vertical branding strategy; 0 = horizontal branding strategy); industry type (1 = service, 0 = non-service); business type (1 = B2C, 0 = non-B2C); type of brand (1 = fictitious, 0 = real); sample (1 = student, 0 = non-student); and publication date (1 = after 2000, 0 = before 2000) were performed and the effect of the moderators on the size and direction of the reported relationships was explored.

4.3.6 | Meta-regression analysis

To test the model simultaneously with all the covariates, a meta-regression was performed using the CMA software (Borenstein et al., 2009). First, the dummy coded categorical variables were incorporated as the covariates and then the impact of the covariates with a sufficient number of studies accepted by CMA was assessed (Borenstein et al., 2009).

5 | RESULTS

This meta-analysis aggregates the existing research by calculating the average correlations for two success drivers of co-branding evaluation: 'positive attitude' and 'behavioural intention towards co-branding'. Table 2 summarises the meta-analysis results for the success drivers of co-branding evaluation in three main predictor categories. The predictor variables examined in at least one study in co-branding literature are collected to form these three main categories as presented in the existing literature: (a) brand characteristics; (b) relational characteristics between brands and (c) consumer-related variables as (e.g. Helmig et al., 2008; Völckner & Sattler, 2006).

The results for the first outcome variable, attitude towards co-branding, show that both brand characteristics and the relationship between brands are positively correlated with the attitude towards co-branding. The bivariate data in Table 2 indicates significant antecedents and outcome associations: the correlation for both brand characteristics ($r_{\text{characteristic}} = 0.257, p < .001$) and relationship between brands ($r_{\text{relationship}} = 0.411, p < .001$) is positive and significant. When compared to pairwise, the correlation of the relationship between brands is significantly larger than the correlation of brand characteristics ($p < .05$). By aggregating all the studies, this paper offers a robust analysis of all the factors and concludes that the importance of the relationship between brands is significantly higher than that of individual brand characteristics.

For the next outcome variable, behavioural intention, the bivariate data indicates the following significant associations between the success drivers and behavioural intention: brand characteristics ($r_{\text{characteristic}} = 0.379, p < .001$); relationship between brands ($r_{\text{relationship}} = 0.465, p < .001$); consumer-related variables ($r_{\text{consumer}} = 0.199, p < .001$), and attitude towards co-branding ($r = 0.606, p < .001$). A pairwise comparison proves that the correlation of consumer related variables and attitude towards co-branding is significantly less than the correlation of attitude towards co-branding with both brand characteristics ($p < .05$) and relationship between brands ($p < .001$).

Bivariate analysis depicted in Table 3 shows that success drivers have significant ($p < .001$) effects on attitude towards co-branding, in the following order of magnitude: brand fit ($r = 0.471$), product fit ($r = 0.342$), and brand equity ($r = 0.257$), where brand equity is a composite variable of brand attitude, perceived quality, brand familiarity and brand trust.

The heterogeneity test reveals that Q values for all the relationships presented in Table 2 are significant ($p < .001$), indicating that the true effect size is not the same in all the studies and hence, there is heterogeneity. I-squared values, being all over 70% also confirm that there is heterogeneity and indicate that a moderator analysis is worthwhile to explore the dispersion of true effect sizes, such as has been performed in other meta-analyses (e.g. Barari et al., 2020; Bijmolt & Pieters, 2001; Borenstein et al., 2009).

5.1 | Results of moderator analyses

The studies were classified based on a moderator variable to compare the effect sizes. Table 4 provides the results for the six different moderators (branding strategy, type of sector, type of business, sample, year of publication, type of publication type, type of brand) tested, one by one, with the data to investigate the differences in success drivers and co-branding attitude relationships. Prediction intervals in the moderator analyses show the extent of the dispersion of true effect sizes (Borenstein et al., 2009). Due to the limited number of studies in the literature on consumer-related characteristics and behavioural intention towards co-branding, the moderator analysis was performed only for the dependent variable, attitude towards co-branding and the

TABLE 2 Meta-analysis results for positive attitude and behavioural intention towards co-branding

Meta-analysis results (random effects model) for dependent variables arranged according to average effect size (95% CI)									
Relationship									
Dependent variable: attitude towards co-branding (ATTC)									
	k	N	r	LL	UL	Q	I ²	SE	Fail-safe N
BC → ATTC	34	12,052	0.257 ^a	0.212	0.301	227 ^b	85	0.005	309
RC → ATTC	42	11,687	0.411 ^a	0.357	0.462	510 ^b	92	0.010	812
CC → ATTC	3	285	0.572 ^a	0.293	0.761	24	92	0.096	65
Dependent variable: behavioural intention towards co-branding (BINT)									
	k	N	r	LL	UL	Q	I ²	SE	Fail-safe N
BC → BINT	10	4,558	0.379 ^a	0.225	0.515	295 ^b	97	0.039	153
RC → BINT	12	4,437	0.465 ^a	0.405	0.521	66 ^b	83	0.008	358
CC → BINT	9	6,144	0.199 ^a	0.154	0.244	26 ^b	70	0.003	75
ATTC → BINT	5	1,365	0.606 ^a	0.305	0.797	203 ^b	98	0.144	233

Abbreviations: ATTC, Attitude towards co-branding; BC, Brand characteristics; BINT, Behavioural intention towards co-branding; CC, Consumer-related characteristics; CI, confidence interval with lower (LL) and upper limit (UL); fail-safe number attenuated at 0.05; I², I² statistic; k, number of effect sizes; N, combined sample size; Q, Q statistic; r, sample size-weighted mean correlation coefficient; RC, Relational characteristics between brands; SE, standard error.

^a $p < .05$. ^b $p < .001$.

TABLE 3 Meta-analysis results of co-branding success factors for sub-variables

Meta-analysis results (random effects model) for dependent variables arranged according to average effect size (95% CI)								
Dependent variable: attitude towards co-branding (ATTC)								
	k	r	LL	UL	Q	I ²	SE	Fail-safe N
Brand equity → ATTC	34	0.257 ^a	0.212	0.301	227	85.4	0.005	309
Brand fit → ATTC	21	0.471 ^a	0.395	0.539	269 ^b	92.6	0.015	589
Product fit → ATTC	19	0.342 ^a	0.274	0.407	149 ^b	87.9	0.010	246

Abbreviations: ATTC, attitude towards co-branding; CI, confidence interval with lower (LL) and upper limit (UL); fail-safe number attenuated at 0.05; I², I² statistic; k, number of effect sizes; Q, Q statistic; r, sample size-weighted mean correlation coefficient; SE, standard error.

^a $p < .05$. ^b $p < .001$.

independent variables, 'Brand characteristics' and 'Relational characteristics' between brands (Borenstein et al., 2009).

Table 4 displays the results for the theoretical moderator (vertical co-branding vs. horizontal co-branding), contextual moderators that are the type of sector (service vs. non-service) and business (B2C vs. non-B2C), and finally method related moderators that are sample type (student vs. non-student), year (after 2000 vs. before 2000), paper type (published vs. non-published) and brand type (fictitious vs. non-fictitious).

5.1.1 | Co-branding strategy: vertical versus horizontal

The correlation between brand characteristics and attitude towards co-branding does not vary significantly by vertical branding strategy versus horizontal ($r_{\text{characteristic}} = 0.239$ in vertical branding vs.

$r_{\text{characteristic}} = 0.266$ in horizontal branding). Similarly, the correlation between the relationship between brands and attitude towards co-branding is not significantly affected by the co-branding strategy ($r_{\text{relationship}} = 0.380$ in vertical branding vs. $r_{\text{relationship}} = 0.420$ in horizontal branding).

There is a moderate correlation of relationship between brands and attitude towards co-branding in both the vertical and the horizontal co-branding strategy, whereas the correlation of brand characteristics and attitude towards co-branding is low in both.

5.1.2 | Service versus non-service

The results for the industry setting, which is a contextual moderator, reveal that the effect of the relationship between brands on attitude towards co-branding is significantly stronger for the non-service sector ($p < .05$).

TABLE 4 Meta-analysis results for theoretical, context-related and method-related moderators

Random effects model – (95% CI)												
Theoretical moderators												
Branding strategy	Vertical branding						Horizontal branding					
	k	N	r	LL	UL	Fail-safe N	k	N	r	LL	UL	Fail-safe N
BC → ATTC	13	3340	0.239 ^a	0.178	0.299	53	21	8712	0.266 ^a	0.206	0.324	261
RC → ATTC	10	2764	0.380 ^a	0.209	0.528	169	32	8924	0.420 ^a	0.367	0.470	643
Context related moderators												
Type of sector	Service						Non-service					
	k	N	r	LL	UL	Fail-safe N	k	N	r	LL	UL	Fail-safe N
BC → ATTC	9	4,276	0.262 ^a	0.147	0.369	164	25	7,567	0.253 ^a	0.212	0.294	150
RC → ATTC												
Business type	B2C						Non-B2C					
	k	N	r	LL	UL	Fail-safe N	k	N	r	LL	UL	Fail-safe N
BC → ATTC	30	10,500	0.261 ^a	0.210	0.310	284	4	1,552	0.228 ^a	0.168	0.286	26
RC → ATTC	38	9,664	0.410 ^a	0.351	0.466	698	4	1,552	0.419 ^a	0.257	0.559	113
Method related moderators												
Sample type	Students						Non-students					
	k	N	r	LL	UL	Fail-safe N	k	N	r	LL	UL	Fail-safe N
BC → ATTC	18	6,762	0.291 ^a	0.236	0.343	265	16	4,668	0.218 ^a	0.152	0.283	58
RC → ATTC	17	5,440	0.422 ^a	0.356	0.485	367	25	6,720	0.402 ^a	0.318	0.479	445
Year	After 2000						Before 2000					
	k	N	r	LL	UL	Fail-safe N	k	N	r	LL	UL	Fail-safe N
BC → ATTC	26	9,706	0.251 ^a	0.194	0.308	246	8	2,346	0.279 ^a	0.242	0.316	63
RC → ATTC	34	9342	0.430 ^a	0.366	0.490	721	8	2,346	0.331 ^a	0.273	0.386	99
Paper type	Published						Non-published					
	k	N	r	LL	UL	Fail-safe N	k	N	r	LL	UL	Fail-safe N
BC → ATTC	28	8918	0.254 ^a	0.198	0.308	251	6	2233	0.271 ^a	0.232	0.309	57
RC → ATTC	35	9430	0.409 ^a	0.344	0.471	657	7	2258	0.418 ^a	0.353	0.479	155

Abbreviations: ATTC, attitude towards co-branding; BC, brand characteristics; CI, confidence interval with lower (LL) and upper limit (UL); fail-safe number attenuated at 0.05.; k, number of effect sizes; N, combined sample size; n.a., not available; r, sample size-weighted mean correlation coefficient; RC, Relational characteristics between brands.

^a $p < .05$.

5.1.3 | B2C versus non-B2C

The results for the contextual moderator, business setting, show that the correlation of success drivers and the attitude towards co-branding does not vary depending on the business setting. In both business settings, there is a moderate correlation of the relationship between brands and attitude towards co-branding, ($r_{\text{relationship}} = 0.410$ and $r_{\text{relationship}} = 0.419$ in B2C and non-B2C business settings, respectively). Moreover, in both business settings, the relationship between brands has a higher correlation than brand characteristics.

5.1.4 | Student sample versus non-student sample

The sample that was used in the studies varies the effect sizes. The correlation of brand characteristics and attitude towards co-branding is significantly stronger ($p < .001$) in studies with a student sample than in those conducted with a non-student sample.

5.1.5 | Year of study: after 2000 versus before 2000

The relationship between brands shows a stronger effect after 2000 than before 2000 ($p < .001$).

TABLE 4 Meta-analysis results for theoretical, context-related and method-related moderators

Random effects model – (95% CI)												
Theoretical moderators												
Branding strategy	Vertical branding						Horizontal branding					
	k	N	r	LL	UL	Fail-safe N	k	N	r	LL	UL	Fail-safe N
BC → ATTC	13	3340	0.239 ^a	0.178	0.299	53	21	8712	0.266 ^a	0.206	0.324	261
RC → ATTC	10	2764	0.380 ^a	0.209	0.528	169	32	8924	0.420 ^a	0.367	0.470	643
Context related moderators												
Type of sector	Service						Non-service					
	k	N	r	LL	UL	Fail-safe N	k	N	r	LL	UL	Fail-safe N
BC → ATTC	9	4,276	0.262 ^a	0.147	0.369	164	25	7,567	0.253 ^a	0.212	0.294	150
RC → ATTC												
Business type	B2C						Non-B2C					
	k	N	r	LL	UL	Fail-safe N	k	N	r	LL	UL	Fail-safe N
BC → ATTC	30	10,500	0.261 ^a	0.210	0.310	284	4	1,552	0.228 ^a	0.168	0.286	26
RC → ATTC	38	9,664	0.410 ^a	0.351	0.466	698	4	1,552	0.419 ^a	0.257	0.559	113
Method related moderators												
Sample type	Students						Non-students					
	k	N	r	LL	UL	Fail-safe N	k	N	r	LL	UL	Fail-safe N
BC → ATTC	18	6,762	0.291 ^a	0.236	0.343	265	16	4,668	0.218 ^a	0.152	0.283	58
RC → ATTC	17	5,440	0.422 ^a	0.356	0.485	367	25	6,720	0.402 ^a	0.318	0.479	445
Year	After 2000						Before 2000					
	k	N	r	LL	UL	Fail-safe N	k	N	r	LL	UL	Fail-safe N
BC → ATTC	26	9,706	0.251 ^a	0.194	0.308	246	8	2,346	0.279 ^a	0.242	0.316	63
RC → ATTC	34	9342	0.430 ^a	0.366	0.490	721	8	2,346	0.331 ^a	0.273	0.386	99
Paper type	Published						Non-published					
	k	N	r	LL	UL	Fail-safe N	k	N	r	LL	UL	Fail-safe N
BC → ATTC	28	8918	0.254 ^a	0.198	0.308	251	6	2233	0.271 ^a	0.232	0.309	57
RC → ATTC	35	9430	0.409 ^a	0.344	0.471	657	7	2258	0.418 ^a	0.353	0.479	155

Abbreviations: ATTC, attitude towards co-branding; BC, brand characteristics; CI, confidence interval with lower (LL) and upper limit (UL); fail-safe number attenuated at 0.05.; k, number of effect sizes; N, combined sample size; n.a., not available; r, sample size-weighted mean correlation coefficient; RC, Relational characteristics between brands.

^a $p < .05$.

5.1.6 | Published versus non-published studies

The results show that the effect sizes do not vary significantly in published and non-published studies. This is an indicator of the absence of publication bias in this meta-analysis.

5.2 | Results of meta-regression

Table 5 provides the results of the meta-regression, testing the influence of all moderators together on the effect size for attitude

towards co-branding. The aim of performing a meta-regression is to investigate the effects of multiple factors simultaneously. However, the use of meta-regression with multiple covariates is not recommended when the number of studies for each covariate is small (< 10) because of the lack of power to explain variable relationships (Lipsey & Wilson, 2001). The meta-regression therefore was performed for the dependent variable, attitude towards co-branding (Borenstein et al., 2009).

As shown in Table 5, the composition of the branding strategy (horizontal vs. vertical) and type of sector (non-service vs. service) were the covariates that were found to be significant ($p < .05$) in

identifying the dispersion of effect sizes in individual brand characteristics and relational characteristics between brands. The model is able to explain 27% of the variance in true effects. Since these are categorical variables, the coefficients give the mean differences in effect sizes for studies on horizontal co-branding vs. vertical co-branding, and studies conducted in non-service businesses vs. service businesses, respectively. In both models, the correlation of brand characteristics and attitude towards co-branding and correlation of relationship between brands and attitude towards co-branding is significantly stronger for the horizontal co-branding practices and also for the non-service sector ($p < .05$).

5.3 | Publication bias test results

In order to minimize publication bias, which occurs when the published studies are unrepresentative of the population of all the relevant studies, the author included relevant unpublished studies in the analysis. The publication bias test was run to check if the potential bias in literature reflects the meta-analysis or not (Borenstein et al., 2009). Consistent with other meta-analyses, established publication bias tests (namely, the Egger test, funnel plot, Rosenthal's Fail-safe N) were performed to assess the possible impact of publication bias (e.g. Blut & Wang, 2020; Hogreve et al., 2017; Rosario et al., 2016; Schmidt & Bijmolt, 2020).

A symmetric funnel plot indicates that there is no evidence that the studies with minor effect sizes fail to be published (Borenstein et al., 2009). Egger's regression test (1997), being insignificant ($p = .330$), confirms the absence of publication bias. Similarly, Fail-safe N suggests that it would take 1,295 more missing data with mean effect size of zero to be retrieved and incorporated in the meta-analysis for the current significant p -value of this meta-analysis to turn to being insignificant. Individual variable-based Fail-safe N results are presented in the relevant effect size tables. The number of studies needed to nullify the effect is overall too large to be a reason for concern (Borenstein et al., 2009). Therefore, the author concludes that there is no publication bias. This is consistent with the moderator analysis that indicated that the effect sizes do not vary significantly in published and non-published studies.

6 | DISCUSSION AND CONCLUSION

6.1 | Theoretical contribution

Although some researchers have quantitatively studied the success factors that drive the positive evaluation of co-branding, there have been recent calls to aggregate the factors and examine their relative importance (Helmig et al., 2008; Newmeyer et al., 2014). This paper responds to these calls by providing the first comprehensive meta-analysis of co-branding success factors.

TABLE 5 Meta-regression results for attitude towards co-branding

Meta-regression results for testing the influence of the moderators on effect size (95% CI)				
Brand characteristics on attitude towards co-branding				
BC → ATTC	β	SE	LL	UL
Intercept	0.495 ^a	0.092	0.314	0.675
Change in effect size if comparison group includes $a(n)$				
Branding strategy (horizontal vs. Vertical)	0.223 ^a	0.109	0.008	0.439
Type of sector (Non-service vs. service)	0.148 ^a	0.117	0.079	0.377
Sample (non-student vs. student)	0.103	0.100	0.093	0.299
Relational characteristics between brands on attitude towards co-branding				
RC → ATTC	β	SE	LL	UL
Intercept	0.5812 ^a	0.069	0.445	0.716
Change in effect size if comparison group includes $a(n)$				
Branding strategy (horizontal vs. vertical)	0.181 ^a	0.112	0.038	0.400
Sector (non-service vs. service)	0.214 ^a	0.126	0.033	0.462
Sample (non-student vs. student)	0.077	0.097	0.112	0.266
Q	7.940			
R ²	27%			

Abbreviations: ATTC, attitude towards co-branding; β , unstandardized regression coefficient; BC, brand characteristics; CI, confidence interval with lower (LL) and upper limit (UL); RC, relational characteristics between brands; SE, standard error.

^a $p < .05$.

TABLE 6 Overview of findings leading to theoretical and managerial contributions

Moderators	Theoretical		Context-related		Method-related		Year	Paper	Brand
	Strategy	Vertical vs. horizontal	Sector	Service vs. non-service	Business	Sample			
Relative importance									
<i>Success factors for a positive attitude towards co-branding</i>									
Relationship between brands	①	No significant difference		Significantly stronger in non-service*	No significant difference	No significant difference	Significantly stronger after 2000**	No significant difference	n.a.
Brand image fit	①								
Product category fit	②								
Brand characteristics	②	No significant difference		No significant difference	No significant difference	Significantly stronger in students**	No significant difference	No significant difference	No significant difference
Brand equity	③								
<i>Success factors for behavioural intention towards co-branding</i>									
Attitude towards alliance	①								
Relationship between brands	②								
Brand characteristics	③								

Numbers in black circles represent the ranking of the highest to lowest impacts of success factors on the relevant dependent variables, 'Attitude towards Co-branding', and 'Behavioural Intention towards Co-branding' (e.g. 1 = highest impact). Numbers in white circles indicate the ranking of the highest to lowest impacts of sub-category success factors.

Abbreviation: n.a., not available.

* $p < .05$. ** $p < .001$.

First, this research provides a robust analysis of all the studied success factors that lead to the positive evaluation of co-branding and brings consensus to the fragmented literature of co-branding. By aggregating all the success factors that have been studied in the literature, this meta-analysis has been able to assign the sub-group variables to one of three categories: brand characteristics, the relationship between brands and consumer-related variables. By identifying each category's magnitude of importance, the meta-analysis provides robust testing of the conceptualisation of these success factors. The relative importance of these factors is shown in Table 6. The meta-analysis shows that it is the relationship between partner brands rather than the individual characteristics of the brands that have a greater impact on the success of co-branding. While previous literature identifies separate fit factors, such as brand fit and product fit, and separate individual brand characteristics, such as brand attitude, perceived product quality, brand equity and brand familiarity, this paper draws attention to the distinguishing aspects of co-branding, namely the individual characteristics of brands and the relationship between the brands. The dyadic relationship between brands plays a key role in the evaluation of co-branding. As brand collaboration becomes an increasingly popular strategy in the fiercely competitive marketplace, choosing the correct partner becomes one of the critical determinants of the strategy's success (Ahn et al., 2009; Phelps, 2016; Singh et al., 2014). Therefore, brands must focus their attention on finding the right partners for them, the right partner in this case is one with whom they have a high degree of fit.

Moreover, the findings of this research address and align prior equivocal findings on particularly the importance of brand image fit and product category fit to the evaluation of co-branding. Brand image fit is more important than product fit to a positive attitude and behavioural intention towards co-branding. In this meta-analysis, bi-variate analysis for the sub-group variables shows that the sequence of success drivers in terms of the magnitude of effect on attitude towards co-branding is as follows: brand fit, product fit and brand equity (composite of brand attitude, perceived quality, trust and familiarity). This meta-analysis thereby answers the call to examine the relative importance of the co-branding success factors. The results find consensus from equivocal findings on the importance of brand fit and product fit on the co-branding evaluation. Brand fit is a success factor that is relatively more important to a positive attitude and behavioural intention towards co-branding when compared to the product fit. Therefore, this paper finds concludes the congruence of perceptions and associations of consumers about the partner brands is more important than the degree of similarity and compatibility between the partner product categories.

Secondly, by aggregating the relevant empirical studies, this meta-analysis moves the discussion away from individual context-based studies towards one that is more generalisable. It addresses the inconsistency in prior findings by investigating the impacts of theoretical, contextual, and method-related moderators on the effect sizes. The findings of the meta-analysis reveal that the

relationship between partner brands has a significantly larger impact on the success of co-branding than that exerted by the individual brand characteristics of partner brands, and this is generalisable to every type of co-branding strategy, business, and industry type.

6.1.1 | Theoretical moderators

Both vertical (e.g. Baumgarth, 2004; Moon & Sprott, 2016; Simonin & Ruth, 1998) and horizontal co-branding (e.g. Ashton & Scott, 2011; Naidoo & Hollebeek, 2016; Roswinanto, 2015) have been investigated in the co-branding literature (although the type of the branding strategy was not specified in some cases). The moderator analysis reveals that the correlation between success factors and attitude towards co-branding does not vary with the co-branding strategy adopted. In both strategies, the correlation of the relationship between brands, which consists of brand fit and product fit, is significantly higher than the individual brand characteristics of the partner brands. This meta-analysis proves that the findings are generalisable to both co-branding strategies, despite the differing levels of integration between brands.

6.1.2 | Contextual moderators

This meta-analysis studies type of industry and business type as contextual moderators. The effect of the relationship between brands on attitude towards co-branding is significantly stronger for the non-service sector ($p < .05$). This is presumably because, in services, consumers take the internal coordination between partner brands for granted since relational coordination is a mutual interaction process between the service providers who are integrated with the task and it is positively related to internal service quality and the customer outcome perceptions (Gittell, 2002).

6.1.3 | Method-related moderators

This meta-analysis explores the year of study, type of brand, and sample population as method-related moderators. The relationship between brands shows a stronger effect in studies conducted after 2000 versus those conducted prior to that year. As Perkins and Fenech (2014) state in the Deloitte Consumer Review, competition in the marketplace is increasing and consumers are becoming more demanding. Presumably, because it is becoming harder for individual brands to meet the more elaborate demands of consumers, consumers evaluate co-branding positively if the degree of fit between the partner brands means that their expectations are more likely to be met. Despite some researchers' suggestions (Shadish & Haddock, 2009), there was no significant difference in the effect sizes when the studies were conducted with real versus fictitious brands. Finally, the correlation of brand characteristics and behavioural intention towards co-branding is significantly stronger

($p < .05$) in studies with a student sample versus studies with a non-student sample. This is consistent with prior meta-analyses that show that the effect sizes derived from student samples often differ from the effect sizes in non-student samples (Peterson, 2001; Roschk et al., 2017). This finding might encourage researchers to not overly rely on students as study participants and to take the necessary steps to ensure that the study can be generalised when a student sample is used.

Thirdly, while this meta-analysis elevates the discussion from one that is concerned with many individual studies towards one that gives an overview of a broader stream of research (Borenstein et al., 2009), it also identifies the gaps in the co-branding literature and presents an agenda for future studies in the field, which will be discussed in detail in Section 7. The results of this meta-analysis highlight the paucity of empirical studies in various industries, such as services and non-B2C, while also pointing out the lack of attention that has been given to some variables, such as consumer-related variables and actual purchasing behaviour.

6.2 | Managerial contribution

Paul Parisi, the former President of PayPal Canada, claims that companies collaborate and combine their strengths to deliver greater consumer experiences (Parisi, 2017). In practice, co-branding successes and failures abound. In order to achieve the requisite degree of positive attitude and behavioural intentions in consumers, it is essential that managerial decision makers can identify the success drivers of co-branding. This meta-analysis with its robust results can guide marketing managers who are considering adopting a co-branding strategy by highlighting which factors must be considered and prioritised. The managerial contribution of this research is twofold: it highlights the importance of the relationship between brands over individual brand characteristics in the evaluation of co-branding, and it recommends that managers acquire understanding about the type of industry and business in which they operate before they embark on a co-branding strategy.

First, this meta-analysis contributes by informing managers about the importance of fit between brands; this is vital information if managers are to correctly prioritise their search criteria for the right partners. The findings show that the correlation between the relationship between brands and co-branding evaluation is significantly more important than the correlation of brand characteristics. This indicates that a brand with relatively high brand equity should not necessarily use its resources to target a potential partner for its specific brand, such as high brand equity; instead, it needs to ensure that there is an adequate fit between the partners. Co-branding, by its nature, requires some interdependence between partner brands (Blackett & Boad, 1999; Newmeyer et al., 2014). In order to be successful, managers need to manage the co-branding as if it were a single brand, and to be able to do that, they must ensure that the brands fit well with each other. The managerial findings of this meta-analysis, summarised in Table 6, call for deeper consideration of the relationship between partner brands in terms of brand fit and product fit. The sub-category analysis reveals

that brands' image fit is more important than the fit between product categories. Specifically, brand image fit has the highest correlation with co-branding evaluation out of all the variables. The potential partner might have high brand equity, but if the two brands' images do not fit, there is little chance that the consumers will positively evaluate the co-branding and it is unlikely to become a commercial success. Comparing the relative importance of brand image fit versus product category fit, brand image fit needs to be assigned a higher weighting in the partner selection and decision-making process. If the partner brands succeed in creating a seamless logic out of the combined offer, consumers can perceive the benefits of the offer that the brands aim to deliver, and hence, will positively evaluate the co-branding.

Secondly, this meta-analysis contributes by recommending managers to take into account the impact of the type of industry and business in which they operate. The findings indicate that the correlation of relational characteristics between brands and attitude towards co-branding is significantly higher in the non-service industries than in service industries. In the context of service industries versus non-service industries, consumers benefit significantly more from brand characteristics that act as quality signalling cues in forming positive towards the co-branding (Rao & Ruekert, 1994). For that reason, managers who are adopting a co-branding strategy in services must pay close attention to the brand characteristics of the partner brands. Managers in the service sector should also ensure that they associate their brand with a partner brand from which they can derive incremental benefit. Moreover, this meta-analysis shows that the type of business does not vary the results, and that in both B2C and non-B2C contexts, the relationship between brands has a higher correlation than brand characteristics. Therefore, the finding that the relationship between brands is the co-branding priority is generalisable to every business type.

Having analysed the theoretical, contextual, and method-related moderators, this meta-analysis concludes that the relationship between brands has a higher correlation than individual brand characteristics on the success of co-branding. This result is generalisable to different types of co-branding strategies (vertical vs. horizontal), businesses (B2C vs. B2B), and industries (service vs. non-service). By knowing the magnitude and direction of the relationship of the success drivers of co-branding, marketing managers can implement effective co-branding strategies.

6.3 | Limitations

The aim of this paper is to aggregate studies on co-branding in order to analyse and consolidate knowledge of the strategy's success drivers. However, it has limitations that are endemic to meta-analyses. First, meta-analysis papers are often criticised for compiling findings from studies of different quality (Leonidou et al., 2002). This paper includes, to the best of the author's knowledge, all the relevant studies that provide effect sizes. In order to be inclusive and avoid publication bias, this paper includes relevant papers that study co-branding success drivers, whether they are published and unpublished (e.g. doctoral dissertations) as it is the norm in systematic meta-analyses

that aim to reach a consensus on the equivocal findings in the literature (e.g. Rosario et al., 2016; Schmidt & Bijmolt, 2020).

Second, although the review of the literature was systematically and comprehensively carried out, making every effort to cover all the literature on co-branding success factors, meta-analysis studies inevitably run the risk of overlooking relevant articles. To the best of the author's knowledge, no such paper has been overlooked in this study. That being said, the literature review uncovered a vast number of co-branding studies, some of which adopt the perspective of the firm rather than the consumer (e.g. Gammoh, 2006), or do not address the relevant conceptual issues such as the papers about crisis strategies in a co-branding context (e.g. Singh & Crisafulli, 2020). Consistent with the implementation of eligibility criteria in other meta-analyses (e.g. Frigerio et al., 2020; Rana & Paul, 2020), the studies that do not meet the criteria are excluded from the meta-analysis. Based on the eligibility criteria presented in Section 4.1, this meta-analysis is performed with studies examining the antecedents of co-branding success as depicted in the conceptual framework in Section 3.

Third, another literature-imposed limitation of a meta-analysis is that some variables or moderators cannot be analysed or are left under-represented due to an insufficient number (or even complete absence) of papers investigating those variables (Knoll & Matthes, 2017; Rana & Paul, 2020). In the case of the literature on co-branding success factors, there is an insufficient number of papers on some of the variables such as variety seeking (Mazodier & Merunka, 2014), brand involvement (Moon & Sprott, 2016), dialectical self (Wang et al., 2020), retail channel (e.g. Yu et al., 2020) and sensory fit (e.g. Ahn et al., 2020). These variables were merged together under the relevant main categories in the meta-analysis (e.g. the sensory fit is grouped under 'relational characteristics between brands'). Any variable that is under-represented in the literature (being examined in less than five studies) and could not be grouped under the main categories (e.g. brand characteristics, relational characteristics and consumer-related characteristics) is excluded from the meta-analysis in order to avoid the mean effect size lacking statistical power (Borenstein et al., 2009). Due to the under-representation of some industries and business types in the literature of co-branding (i.e. service industries and non-B2C businesses) and the limited number of studies conducted for some variables (i.e. consumer-related characteristics) the specified moderators leave some variance unexplained. However, the conceptual framework and the number of moderators examined can be expanded as more studies accumulate in the literature. Despite these limitations, this paper contributes to a better understanding of the success drivers of co-branding.

7 | FUTURE RESEARCH DIRECTIONS

In addition to yielding valuable information about the success drivers of co-branding, this meta-analysis identifies gaps in the literature and exposes several avenues for further research as depicted

in Table 7. Such knowledge gaps become visible to researchers when they find they cannot analyse some of the variables or moderators due to the limited number of studies that have the relevant data set in the literature (Frigerio et al., 2020; Knoll & Matthes, 2017; Rana & Paul, 2020). Therefore, this meta-analysis encourages further research to focus on the following issues: (a) understudied antecedents; (b) additional outcome variables; (c) additional moderators; (d) methods other than those used in prior research; and (e) the underlying psychological mechanisms.

First, this paper calls for further research to study the additional or understudied antecedents that may affect the consumer evaluation of co-brandings, such as the marketing context and consumer-specific variables. Future research might investigate marketing support and retailer acceptance as the marketing context variables; these were studied in the meta-analysis of Völckner and Sattler (2006) and found to have a direct effect on brand extension. The level of marketing support, such as the advertising budget or the firm's marketing competence, might play an important role in consumers' evaluation of co-branding.

Similar to the effect of marketing support, retailer acceptance might be as important to co-branding success as it is to brand extension. If retailer acceptance of co-branding is high, the retailer is likely to give more exposure to the co-branding, increasing its visibility. Given that the effect size of the marketing context on the success of a brand extension has been found to be high (Völckner & Sattler, 2006), it is worthwhile studying this as a potential antecedent in future studies on co-branding.

Next, this meta-analysis on the success factors of co-branding reveals that consumer-related variables have not attracted enough attention in the studies measuring attitude towards co-branding. It has been shown that consumer-related characteristics might be important explanatory variables in branding studies (Barone et al., 2000; Czellar, 2003). Consumer innovativeness and risk acceptance level are two of the consumer-related characteristics that, although neglected in the co-branding literature, have been examined in other branding studies (Klink & Daniel, 2001; Nijssen, 1999). Therefore, it would be interesting to incorporate these consumer-related variables into the studies of co-branding, where two brands are brought together on purpose to create additional value (Blackett & Boad, 1999). In summary, future research could focus on additional facets of success drivers in co-branding, such as marketing context (e.g. marketing support, retailer acceptance, price) and consumer-related variables (e.g. consumer innovativeness, risk acceptance, dialectical self).

Second, future research could consider additional success measures as dependent variables in addition to the ones used in prior research. The aggregated studies on the success drivers conceptualise success as a positive attitude and behavioural intention towards co-branding. This could be extended with future studies that might, for example, measure actual sales, which would naturally require a different method for collecting data. Furthermore, the transfer of associations (or 'spillover effects') from one brand to the other or from co-branding to the partner brands could be useful additions

TABLE 7 Future research directions

Research agenda	
Antecedents	<p>How does the marketing context (e.g. advertising, price) affect the evaluation of co-branding?</p> <p>What impact do retailers exert on the success of co-branding?</p> <p>How do the innovativeness and risk acceptance of consumers affect the evaluation of co-branding?</p> <p>How does the sensory fit between brands impact the evaluation of co-branding relative to the product in various industries?</p>
Outcome variables	<p>How do the attitude and behavioural intention towards co-branding relate to its actual sales and profit?</p> <p>How do associations transfer between brands? How do the partner brands elevate the positive spillover effects? How do the partner brands mitigate the risks of negative spillover effects?</p>
Moderators	<p>How do the different characteristics of services and goods impact consumer evaluation of co-branding?</p> <p>What are the success drivers in the evaluation of vertical co-branding?</p> <p>What impact do the differing characteristics of B2C and B2B have on the consumer evaluation of co-branding?</p> <p>What are the success drivers in the evaluation of digital co-branding?</p> <p>How generalisable are the findings in the current literature?</p>
Method	<p>What other methods, other than surveys, could be used to measure actual consumer behaviour rather than intentions?</p> <p>What other methods, other than surveys, could be used to explore the underlying mechanisms in consumers' perception of fit between the brands?</p> <p>What other methods could be used to investigate change in attitudes and behavioural intention towards a co-branding over the life cycle of the co-branding?</p> <p>How generalisable are the findings of studies conducted with a student sample in co-branding literature?</p>
Underlying psychological processes	<p>What are the underlying psychological mechanisms for perceiving 'brands fit'?</p> <p>What are the underlying cognitive processes behind the transfer of associations between the brands in a co-branding?</p> <p>How do consumers relate the different positioning of the individual brands to the success of the newly launched co-branding offering?</p>

if studied in a more comprehensive meta-analysis (Simonin & Ruth, 1998). This meta-analysis takes a consumer perspective, whereas a company perspective could equally as well have been taken. Helmig et al., and and's (2008) framework suggest studying the economic outcome of co-branding as the dependent variable, which would require incorporation of the sales profit and return on investment. The models covering the firm's perspective could be very informative for both academics and practitioners (Helmig et al., 2008). By focusing on these understudied outcome variables, future research could expand this meta-analysis to derive a more holistic understanding of co-branding.

Third, researchers are encouraged to conduct further research on understudied moderators, both theoretical and contextual. This meta-analysis reveals that one of the theoretical moderators, vertical co-branding or ingredient branding, has not attracted as much attention in the literature as horizontal co-branding. Further empirical research into vertical co-branding (ingredient branding) would contribute to the overall knowledge about co-branding strategies (Moon & Sprott, 2016). This meta-analysis reveals a paucity of studies exploring some contextual moderators that have been included in the meta-analysis, such as the industry and business type. It shows that prior research has mainly concentrated on fast-moving consumer goods (FMCG) in B2C businesses, and therefore this meta-analysis includes comparatively more studies from FMCG in B2C settings. However, the dynamics of the service and non-service markets are different, as are the decision-making processes of customers in B2C and non-B2C businesses (Hogreve et al., 2017; Manning et al., 2010; Verbeke et al., 2011). Future research could focus on various service industries and non-B2C businesses to get

a better understanding of co-branding success factors in various contexts. Another research context that has not received any attention is that of the online alliance. Given the growing number of digital alliances in practice (e.g. Spotify and Starbucks), the online context would benefit from academic attention (Jayawardhena et al., 2007; Singh et al., 2016). Further research into co-branding in an online context could help inform managers who are navigating digital co-branding, which will enable them to gain a competitive advantage. These understudied moderators are symptomatic of the generalisability issue of the findings in the current literature. Moreover, it is possible that some of the success drivers jointly and synergistically influence consumers' evaluation of co-branding. Future research is encouraged to investigate which factors interact with each other. This meta-analysis clearly identifies a need for further co-branding studies to cover the limited theoretical and contextual moderators of this meta-analysis, such as vertical co-branding, service businesses, B2B and online settings to gain a better understanding of the boundary conditions and increase generalisability of results.

The fourth issue to address in future research is related to the methods used in prior research. The majority of studies in co-branding have analysed consumers' brand evaluation at a single point in time, whereas it would be interesting to collect more evidence with longitudinal measurements (such as scanner data) providing actual field data. Identifying the potential longitudinal effects of the co-branding success factors would have considerable implications for management (i.e. seeing the impact of marketing support on the success of co-branding over a period of time; Hogreve et al., 2017). Furthermore, actual sales data might generate new

TABLE 8 Coded articles

Study	Publication	Publication type	Strategy	Brand type	Sector	Industry
Ahn et al. (2009)	Journal of Retailing and Consumer Services	Journal	Horizontal	Real	B2C	Non-service
Ahn et al. (2020)	International Journal of Advertising	Journal	Horizontal	Fictitious	B2C	Non-service
Arnett et al. (2010)	Journal of Marketing Management	Journal	Vertical	Real	B2C	Non-service
Ashton and Scott (2011)	Journal of Vacation Marketing	Journal	Horizontal	Real	B2C	Service
Baumgarth (2004)	Journal of Marketing Communications	Journal	Vertical	Real	B2C	Non-service
Bleijerveld et al. (2015)	Journal of Service Management	Journal	Horizontal	Fictitious	B2C	Service
Boo (2003)	Unpublished	Dissertation	Horizontal	Fictitious	B2C	Service
Bouten et al. (2011)	Journal of Product Innovation Management	Journal	Horizontal	Real	B2C	Non-service
James (2006)	Journal of Product and Brand Management	Journal	Horizontal	Real	B2C	Non-service
Garcia et al. (2017)	Journal of Product and Brand Management	Journal	Horizontal	Real	B2C	Service
Helmig et al. (2007)	Journal of Marketing Management	Journal	Horizontal	Real	B2C	Non-service
Ho et al. (2017)	Journal of Product and Brand Management	Journal	Horizontal	Real	B2C	Non-service
James (2006)	Journal of Consumer Marketing	Journal	Horizontal	Real	B2C	Non-service
Lafferty (1999)	Unpublished	Dissertation	Horizontal	Real	B2C	Non-service
Lafferty et al. (2004)	Psychology and Marketing	Journal	Horizontal	Real	B2C	Service
Ma et al. (2018)	Journal of Contemporary Marketing Science	Journal	Horizontal	Real	B2C	Non-service
Mazodier and Merunka (2014)	Journal of Business Research	Journal	Horizontal	Real	B2C	Non-service
Moon and Sprott (2016)	Journal of Business Research	Journal	Vertical	Real	B2C	Non-service
Naidoo and Hollebeek (2016)	Journal of Business Research	Journal	Horizontal	Real	B2C	Service
Rodrigue and Biswas (2004)	Journal of Product and Brand Management	Journal	Vertical	Real	B2C	Non-service
Roswinanto (2015)	Unpublished	Dissertation	Horizontal	Real	B2C	Non-service
Senechal et al. (2014)	Journal of Business Ethics	Journal	Horizontal	Real	Non-B2C	Non-service
Simonin and Ruth (1998)	Journal of Marketing Research	Journal	Vertical	Real	Non-B2C	Non-service
Singh (2016)	Journal of Business Ethics	Journal	Horizontal	Real	B2C	Service
Singh et al. (2014)	Marketing Intelligence and Planning	Journal	Horizontal	Real	B2C	Non-service
Wang et al. (2020)	International Marketing Review	Journal	Horizontal	Fictitious	B2C	Non-service
Yu et al. (2017)	Unpublished	C. Proceeding	Horizontal	Real	B2C	Non-service

insights on the nature of co-branding success and supplement the attitude and intention studies that currently dominate the literature. It is accepted that an individual's behaviour intentions do not always translate into real behaviours. Therefore, collecting actual field data would contribute to the understanding of co-branding success and offer practical implications (Dalman & Puranam, 2017; Nisbett & Wilson, 1977). Although the use of cross-sectional data is understandable due to limited resources, it does not allow for a change in attitude towards co-branding over different stages of its

life cycle to be taken into account. Research that is more exploratory and qualitative could be used to shed light on the cognitive processes that consumers go through when exposed to co-branding. The use of qualitative research in the field of co-branding could help explain the underlying psychological processes in the evaluation of fit between the brands in co-branding and the possible transfer of association between brands. Another method-related issue to be addressed in future research is the selection of the sample. Some researchers claim that studies conducted with a student sample

may produce larger effect sizes because there is less error variance in measurement due to the homogeneity of student samples (Orsingher et al., 2009; Peterson, 2001). Indeed, the findings of this meta-analysis show that the correlation between brand characteristics and evaluation of co-branding is significantly stronger in studies with a student sample than in studies with a non-student sample. This finding should encourage researchers to conduct studies with a non-student sample to ensure proper generalizability. By drawing attention to these method-related issues, this meta-analysis offers some further avenues for future research.

The fifth item identified for future research addresses the characteristic of meta-analysis itself and shows how future research could benefit from and expand it further. The scope of the meta-analysis papers is limited to the relevant studies conducted in the literature. Meta-analysis studies aim to synthesise prior studies, which might be state of the art in their field. Although meta-analysis studies are often limited in how they explain the underlying psychological processes, they can highlight the gaps in the literature and call for further studies examining these concepts for depth understanding (Rana & Paul, 2020). This meta-analysis highlights the importance of brand image fit in the evaluation of consumers by calculating the average effect size. However, despite the importance of fit between the partner brands to the success of co-branding, there is no universally accepted definition or conceptualisation of fit (Völckner & Sattler, 2006). While most researcher identifies fit as the brand image fit and product category fit, Ahn et al. (2020) examine the effectiveness of sensory fit, that is under-investigated so far in the literature. This meta-analysis encourages further research to examine why consumers perceive some brands as being a good fit with each other while others are seen as less so. Therefore, this meta-analysis offers guidance for how future research might reveal the underlying processes in consumer attitudes and behaviours towards co-branding. Hence, this meta-analysis contributes to the literature by outlining directions for further research, which would advance the understanding of this promising branding strategy and help maximise its benefits while mitigating its risks.

8 | ARTICLES INCLUDED IN THE META- ANALYSIS

Coded articles are included in Table 8.

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CONFLICT OF INTEREST

The author declares that there is no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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REFERENCES

- Aaker, D. (1991). *Managing brand equity: Capitalizing on the value of a brand name*. The Free Press.
- Aaker, J. L. (1999). The malleable self: The role of self-expression in persuasion. *Journal of Marketing Research*, 36(2), 45–57. <https://doi.org/10.1177/002224379903600104>
- Adams, A. (2013). Why Tiffany & Co. was ordered to pay almost half a billion dollars to the Swatch group. <https://www.forbes.com/sites/arieladams/2013/12/23/why-tiffany-co-was-ordered-to-pay-almost-half-a-billion-dollars-to-the-swatch-group/#799977175001>
- Agarwal, M., & Rao, V. (1996). An empirical comparison of consumer-based measures of brand equity. *Marketing Letters*, 7(3), 237–247.
- Ahn, J., Kim, A., & Sung, Y. (2020). The effects of sensory fit on consumer evaluations of co-branding. *International Journal of Advertising*, 39(4), 486–503. <https://doi.org/10.1080/02650487.2019.1652518>
- Ahn, S. K., Kim, H. J., & Forney, J. A. (2009). Co-marketing alliances between heterogeneous industries: Examining perceived match-up effects in product, brand and alliance levels. *Journal of Retailing and Consumer Services*, 16(6), 477–485. <https://doi.org/10.1016/j.jretconser.2009.08.003>
- Ajzen, I., & Fishbein, M. (1977). Attitude-behaviour relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84(5), 888–918.
- Anderson, N. H. (1981). *Foundations of information integration theory*. Academic Press.
- Arnett, D. B., Laverie, D. A., & Wilcox, J. B. (2010). A longitudinal examination of the effects of retailer-manufacturer brand alliances: The role of perceived fit. *Journal of Marketing Management*, 26(2), 5–27. <https://doi.org/10.1080/02672570903534647>
- Arts, J., Frambach, R., & Bijmolt, T. (2011). Generalisations on consumer innovation adoption: A meta-analysis on drivers of intention and behaviour. *International Journal of Research in Marketing*, 28(2), 134–144.
- Ashraf, R., & Merunka, D. (2016). The use and misuse of student samples: An empirical investigation of European marketing research. *Journal of Consumer Behaviour*, 16(4), 295–308. <https://doi.org/10.1002/cb.1590>
- Ashton, A. S., & Scott, N. (2011). Hotel restaurant co-branding: The relationship of perceived brand fit with intention to purchase. *Journal of Vacation Marketing*, 17(4), 275–285. <https://doi.org/10.1177/1356766711420838>
- Barari, M., Ross, M., Thaichon, S., & Surachartkumtonkun, J. (2020). A meta-analysis of customer engagement behaviour. *International Journal of Consumer Studies*, 1–21.
- Barone, M. J., Miyazaki, A. D., & Taylor, K. A. (2000). The influence of cause-related marketing on consumer choice: Does one good turn deserve another? *Journal of the Academy of Marketing Science*, 28(2), 248–262.
- Baumgarth, C. (2004). Evaluations of co-brands and spillover effects: Further empirical results. *Journal of Marketing Communications*, 10(3), 115–131. <https://doi.org/10.1080/13527260410001693802>
- Beem, D. (2010). The case for co-branding. <https://www.forbes.com/2010/03/16/cold-stone-creamery-dan-beem-rocky-mountain-chocolate-cmo-network-co-brandins>
- Besharat, A. (2010). How co-branding versus brand extensions drive consumers' evaluations of new products: A brand equity approach. *Industrial Marketing Management*, 39(8), 1240–1249. <https://doi.org/10.1016/j.indmarman.2010.02.021>

- Besharat, A., & Langan, R. (2014). Towards the formation of consensus in the domain of co-branding: Current findings and future priorities. *Journal of Brand Management*, 21(2), 112–132. <https://doi.org/10.1057/bm.2013.25>
- Bijmolt, T., & Pieters, R. (2001). Meta-analysis in marketing when studies contain multiple measurements. *Marketing Letters*, 12(2), 157–169.
- Bijmolt, T., Van Heerde, H., & Pieters, R. (2005). New empirical generalisations on the determinants of price elasticity. *Journal of Marketing Research*, 42(2), 141–156.
- Blackett, T., & Boad, B. (1999). *Co-branding: The science of alliance*. MacMillan Press.
- Blackett, T., & Russell, N. (2000). Co-branding - the science of alliance. *Journal of Brand Management*, 7(3), 161–170. <https://doi.org/10.1057/bm.2000.3>
- Blankson, C., & Kalafatis, S. P. (1999). Issues and challenges in the positioning of service brands: A review. *Journal of Product and Brand Management*, 8(2), 106–118. <https://doi.org/10.1108/10610429910266968>
- Bleijerveld, J., Gremler, D., & Lemmink, M. (2015). Service alliances between unequals: The apple does not fall far from the better tree. *Journal of Service Management*, 26(5), 807–822. <https://doi.org/10.1108/JOSM-06-2015-0183>
- Blut, M., & Wang, C. (2020). Technology readiness: A meta-analysis of conceptualizations of the construct and its impact on technology usage. *Journal of the Academy of Marketing Science*, 48(4), 649–669. <https://doi.org/10.1007/s11747-019-00680-8>
- Boo, H. C. (2003). Brand alliance model: the moderating role of consumption goals and image congruency in consumers' hotel brand evaluations. Thesis, The Pennsylvania State University.
- Borenstein, M., Hedges, L., Higgins, J., & Rothstein, H. (2009). *Introduction to meta-analysis*. John Wiley and Sons.
- Bouten, L. M., Snelders, D., & Hultink, E. J. (2011). The impact of fit measures on the consumer evaluation of new co-branded products. *Journal of Product Innovation Management*, 28(4), 455–469. <https://doi.org/10.1111/j.1540-5885.2011.00819.x>
- Brady, M., Cronin, J. Jr, Fox, G., & Roehm, M. (2008). Strategies to offset performance failures: The role of brand equity. *Journal of Retailing*, 84(2), 151–164. <https://doi.org/10.1111/j.1540-5885.2011.00819.x>
- Chang, W., & Taylor, S. A. (2016). The effectiveness of customer participation in new product development: A meta-Analysis. *Journal of Marketing*, 80(1), 47–64. <https://doi.org/10.1509/jm.14.0057>
- Charlton, B. (1996). The uses and abuses of meta-analysis. *Family Practice*, 13(4), 397–401. <https://doi.org/10.1093/fampra/13.4.397>
- Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand effect to brand performance: The role of brand loyalty. *Journal of Marketing*, 65(4), 81–93.
- Czellar, S. (2003). Consumer attitude towards brand extensions: An integrative model and research propositions. *International Journal of Research in Marketing*, 20(1), 97–115.
- Dabić, M., Vlačić, B., Paul, J., Dana, L. P., Sahasranamam, S., & Glinka, B. (2020). Immigrant entrepreneurship: A review and research agenda. *Journal of Business Research*, 113, 25–38. <https://doi.org/10.1016/j.jbusres.2020.03.013>
- Dalman, M. D., & Puranam, K. (2017). Consumer evaluation of ingredient branding strategy. *Management Research Review*, 40(7), 768–782. <https://doi.org/10.1108/MRR-04-2016-0092>
- Desai, K., Gauri, D., & Ma, Y. (2014). An empirical investigation of composite Product Choice. *Journal of Retailing*, 90(4), 493–510. <https://doi.org/10.1016/j.jretai.2014.09.002>
- Desai, K., & Keller, K. (2002). The effects of ingredient branding strategies on host brand extendibility. *Journal of Marketing*, 66(1), 73–93.
- Dickinson, S., & Heath, T. (2006). A comparison of qualitative and quantitative results concerning evaluations of co-branded offerings. *Journal of Brand Management*, 13(6), 393–406. <https://doi.org/10.1057/palgrave.bm.2540281>
- Dutta, S., & Pullig, C. (2011). Effectiveness of corporate responses to brand crises: The role of crisis type and response strategies. *Journal of Business Research*, 64(12), 1281–1287.
- Egger, M., Smith, G. D., Schneider, M., & Minder, C. (1997). Bias in meta-analysis detected by a simple graphical test. *BMJ*, 315(7109), 629–634. <https://doi.org/10.1136/bmj.315.7109.629>
- Eisend, M., & Stokburger-Sauer, N. (2013). Brand personality: A meta-analytic review of antecedents and consequences. *Marketing Letters*, 24(3), 205–216. <https://doi.org/10.1007/s11002-013-9232-7>
- Erdem, T., & Swait, J. (1998). Brand equity as signalling phenomenon. *Journal of Consumer Psychology*, 7(2), 131–157.
- Farley, J., Donald, R. L., & Alan, S. (1995). Empirical marketing generalizations using meta-analysis. *Marketing Science*, 14(3), 36–46.
- Frigerio, M., Ottaviani, C., & Vandone, D. (2020). A meta-analytic investigation of consumer over-indebtedness: The role of impulsivity. *International Journal of Consumer Studies*, 44(4), 328–342. <https://doi.org/10.1111/ijcs.12570>
- Gammoh, B. S. (2006). Propensity to participate in brand alliances: a managerial perspective. Thesis, Faculty of the Graduate College of the Oklahoma State University.
- Garcia, H. R., Lengler, J., & Consolación-Segura, C. (2017). Co-branding strategy in cause-related advertising: The fit between brand and cause. *Journal of Product and Brand Management*, 26(2), 135–150. <https://doi.org/10.1108/JPBm-07-2015-0939>
- Gertner, D. (2011). A (tentative) meta-analysis of the 'place marketing' and 'place branding' literature. *Journal of Brand Management*, 19(2), 112–131. <https://doi.org/10.1057/bm.2011.13>
- Geylani, T., Ter Hofstede, F., & Inman, J. (2008). Image reinforcement or impairment: The effects of co-branding on attribute uncertainty. *Marketing Science*, 27(4), 730–744. <https://doi.org/10.1287/mksc.1070.0326>
- Gilal, F., Zhang, J., Paul, J., & Gilal, N. (2019). The role of self-determination theory in marketing science: An integrative review and agenda for research. *European Management Journal*, 37(1), 29–44. <https://doi.org/10.1016/j.emj.2018.10.004>
- Gittell, J. (2002). Relationships between service providers and their impact on customers. *Journal of Service Research*, 4(4), 299–311. <https://doi.org/10.1177/1094670502004004007>
- Givon, M. (1984). Variety seeking through brand switching. *Marketing Science*, 3, 1–22. <https://doi.org/10.1287/mksc.3.1.1>
- Gonzalez-Mule, E., & Aguinis, H. (2018). Advancing theory by assessing boundary conditions with meta-regression: A critical review and best-practice recommendations. *Journal of Management*, 44(6), 2246–2273. <https://doi.org/10.1177/0149206317710723>
- Hao, A., Paul, J., Trott, S., Guo, C., & Wu, H. (2019). Two decades of research on nation branding: a review and future research agenda. *International Marketing Review*, 38(1), 46–69. <https://doi.org/10.1108/IMR-01-2019-0028>
- Haugtvedt, C., Herr, P., & Kardes, F. (2008). *Handbook of consumer psychology*. Taylor and Francis Group.
- Helm, S. V., & Ozergin, B. (2015). Service inside: The impact of ingredient service branding on quality perceptions and behavioural intentions. *Industrial Marketing Management*, 50, 142–149.
- Helmig, B., Huber, J. A., & Leeftang, P. (2007). Explaining behavioural intentions towards co-branded products. *Journal of Marketing Management*, 23(3), 285–304.
- Helmig, B., Huber, J., & Leeftang, P. (2008). Co-branding the state of the art. *Schmalenbach Business Review*, 60(4), 359–377. <https://doi.org/10.1007/BF03396775>
- Ho, H., Lado, N., & Rivera-Torres, P. (2017). Detangling consumer attitudes to better explain co-branding success. *Journal of Product and Brand Management*, 26(7), 704–721. <https://doi.org/10.1108/JPBm-11-2015-1039>
- Hogreve, J., Iseke, A., Derfuss, K., & Eller, T. (2017). The service-profit chain: A meta-analytic test of a comprehensive

- theoretical framework. *Journal of Marketing*, 81(3), 41–61. <https://doi.org/10.1509/jm.15.0395>
- Hunter, J. E., & Schmidt, F. (2004). *Methods of meta-analysis*. Sage Publications.
- James, D. (2005). Guilty through association: Brand association transfer to brand alliances. *Journal of Consumer Marketing*, 22(1), 14–24. <https://doi.org/10.1108/07363760510576518>
- James, D. O. (2006). Extension to alliance: Aaker and Keller's model revisited. *Journal of Product and Brand Management*, 15(1), 15–22. <https://doi.org/10.1108/10610420610650846>
- Jayawardhena, C., Wright, L. T., & Dennis, C. (2007). Consumers online: Intentions, orientations and segmentation. *International Journal of Retail and Distribution Management*, 35(6), 515–526. <https://doi.org/10.1108/09590550710750377>
- Kan, E. (2015). Mark parker: Details in collaboration. <https://hypebeast.com/2015/10/mark-parker-details-in-collaboration>
- Kardes, F., Fennis, B., Hirt, E., Tormala, Z., & Bullington, B. (2007). The role of the need for cognitive closure in the effectiveness of the disrupt-then-reframe influence technique. *Journal of Consumer Research*, 34(3), 377–385.
- Keller, K. (1993). Conceptualising, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1–22.
- Keranen, J., Piirainen, K., & Salminen, R. (2012). Systematic review on B2B branding: Research issues and avenues for future research. *Journal of Product and Brand Management*, 21(6), 404–417. <https://doi.org/10.1108/10610421211264892>
- Kirca, A. H., Jayachandran, S., & Bearden, W. O. (2005). Market orientation: A meta-analytic review and assessment of its antecedents and impact on performance. *Journal of Marketing*, 69(4), 24–41. <https://doi.org/10.1509/jmkg.69.2.24.60761>
- Klink, R., & Daniel, C. S. (2001). Threats to the external validity of brand extension research. *Journal of Marketing Research*, 38(8), 326–335. <https://doi.org/10.1509/jmkr.38.3.326.18864>
- Knoll, J., & Matthes, J. (2017). The effectiveness of celebrity endorsements: a meta-analysis. *Journal of the Academy Marketing Science*, 45, 55–75. <https://doi.org/10.1007/s11747-016-0503-8>
- Koschate-Fischer, N., Hoyer, W., & Wolframm, C. (2019). What if something unexpected happens to my brand? Spillover effects from positive and negative events in a co-branding partnership. *Psychology and Marketing*, 36(8), 758–772.
- Kumar, A., Paul, J., & Unnithan, A. (2020). Masstige marketing: A review, synthesis and research agenda. *Journal of Business Research*, 113, 384–398. <https://doi.org/10.1016/j.jbusres.2019.09.030>
- Kumar, P. (2005). The impact of cobranding on customer evaluation of brand counter-extensions. *Journal of Marketing*, 69(3), 1–18. <https://doi.org/10.1509/jmkg.69.3.1.66358>
- Lafferty, B. (1999). Assessing cause-brand alliance evaluations on subsequent attitudes towards the cause and the brand. Thesis, The Florida State University.
- Lafferty, B., Goldsmith, R. E., & Hult, G. (2004). The impact of the alliance on the partners: A look at cause-brand alliances. *Psychology and Marketing*, 21(7), 509–531. <https://doi.org/10.1002/mar.20017>
- Lanseng, E. J., & Olsen, L. E. (2012). Brand alliances: The role of brand concept consistency. *European Journal of Marketing*, 46(9), 1108–1126. <https://doi.org/10.1108/03090561211247874>
- Leonidou, L., Katsikeas, C., & Samiee, S. (2002). Marketing strategy determinants of export performance: A meta-analysis. *Journal of Business Research*, 55(1), 51–67. [https://doi.org/10.1016/S0148-2963\(00\)00133-8](https://doi.org/10.1016/S0148-2963(00)00133-8)
- Leuthesser, L., Kohli, C., & Suri, R. (2003). 2+2=5? A framework for using co-branding to leverage a brand. *Journal of Brand Management*, 11(1), 35–47. <https://doi.org/10.1057/palgrave.bm.2540146>
- Lipsey, M., & Wilson, D. (2001). *Practical meta-analysis*. Sage.
- Ma, B., Cheng, F., Bu, J., & Jiang, J. (2018). Effects of brand alliance on brand equity. *Journal of Contemporary Marketing Science*, 1(1), 22–33. <https://doi.org/10.1108/JCMARS-08-2018-0007>
- Manning, G., Reece, B., & Ahearne, M. (2010). *Selling today: Creating customer value*. Pearson Prentice Hall.
- Mazodier, M., & Merunka, D. (2014). Beyond brand attitude: Individual drivers of purchase for symbolic cobranded products. *Journal of Business Research*, 67(7), 1552–1558. <https://doi.org/10.1016/j.jbusres.2014.01.015>
- McCarthy, M. S., & Norris, D. G. (1999). Improving competitive position using branded ingredients. *Journal of Product and Brand Management*, 8(4), 267–285. <https://doi.org/10.1108/10610429910284210>
- Melewar, T., Gotsi, M., & Andriopoulos, C. (2012). Shaping the research agenda for corporate branding: avenues for future research. *European Journal of Marketing*, 46(5), 600–608. <https://doi.org/10.1108/03090561211235138>
- Mishra, R., Kr Singh, R., & Koles, B. (2020). Consumer decision-making in Omnichannel retailing: Literature review and future research agenda. *International Journal of Consumer Studies*, 1–28.
- Moon, H., & Sprott, D. E. (2016). Ingredient branding for a luxury brand: The role of brand and product fit. *Journal of Business Research*, 69(12), 5768–5774. <https://doi.org/10.1016/j.jbusres.2016.04.173>
- Naidoo, V., & Hollebeek, L. D. (2016). Higher education brand alliances: Investigating consumers' dual-degree purchase intentions. *Journal of Business Research*, 69(8), 3113–3121. <https://doi.org/10.1016/j.jbusres.2016.01.027>
- Newmeyer, C., Venkatesh, R., & Chatterjee, R. (2014). Cobranding arrangements and partner selection: A conceptual framework and managerial guidelines. *Journal of the Academy of Marketing Science*, 42(2), 103–118. <https://doi.org/10.1007/s11747-013-0343-8>
- Newmeyer, C., Venkatesh, R., Ruth, J., & Chatterjee, R. (2018). A typology of brand alliances and consumer awareness of brand alliance integration. *Marketing Letters*, 29(3), 275–289. <https://doi.org/10.1007/s11002-018-9467-4>
- Nielsen. (2017). Perspectives: 3 things big FMCG marketers need to do to win again. <https://www.nielsen.com/be/en/insights/article/2017/perspectives-3-things-big-fmcg-marketers-need-to-do-to-win-again>
- Nijssen, E. J. (1999). Success factors of line extensions of fast-moving consumer goods. *European Journal of Marketing*, 33(5), 450–469. <https://doi.org/10.1108/03090569910262044>
- Nisbett, R. E., & Wilson, T. (1977). Telling more than we can know: Verbal reports on mental processes. *Psychological Review*, 84(3), 231–259. <https://doi.org/10.1037/0033-295X.84.3.231>
- Norris, D. G. (1992). Ingredient branding: A strategy option with multiple beneficiaries. *Journal of Consumer Marketing*, 9(3), 19–31. <https://doi.org/10.1108/07363769210035206>
- Norris, D. G. (1993). Intel inside: Branding a component in a business market. *Journal of Business and Industrial Marketing*, 8(1), 14–24. <https://doi.org/10.1108/08858629310027560>
- Orsingher, C., Valentini, S., & Angelis, M. (2009). A Meta-analysis of satisfaction with complaint handling in services. *Journal of the Academy of Marketing Science*, 38(2), 169–186. <https://doi.org/10.1007/s11747-009-0155-z>
- Palmatier, R., Dant, R., Grewal, D., & Evans, K. (2006). Factors influencing the effectiveness of relationship marketing: A meta-analysis. *Journal of Marketing*, 70(4), 136–153. <https://doi.org/10.1509/jmkg.70.4.136>
- Parisi, P. (2017). The power of partnership: Why businesses are better together?. <https://www.theglobeandmail.com/report-on-business/careers/leadership-lab/the-power-of-partnerships-why-businesses-are-better-together/article36529258/>
- Park, C. W., Jun, S. Y., & Shocker, A. D. (1996). Composite branding alliances: An investigation of extension and feedback effects. *Journal of Marketing Research*, 33, 453–466. <https://doi.org/10.1177/002224379603300407>
- Paul, J., & Benito, G. R. (2018). A review of research on outward foreign direct investment from emerging countries, including China: What do we know, how do we know and where should we be heading? *Asia Pacific Business Review*, 24(1), 90–115. <https://doi.org/10.1080/13602381.2017.1357316>

- Paul, J., & Criado, A. (2020). The art of writing literature review: What do we know and what do we need to know? *International Business Review*, 29(4), 101717.
- Perkins, B., & Fenech, C. (2014). The Deloitte consumer review: The growing power of consumers. http://www.deloitte.com/view/en_GB/uk/industries/consumer-business/research-publications
- Peterson, R. (2001). On the use of college students in social science research: Insights from a second-order meta-analysis. *Journal of Consumer Research*, 28, 450–461. <https://doi.org/10.1086/323732>
- Peterson, R., & Brown, S. (2005). On the use of beta-coefficients in meta-analysis. *Journal of Applied Psychology*, 90(1), 175–181. <https://doi.org/10.1037/0021-9010.90.1.175>
- Phelps, M. (2016). Build, buy or collaborate: 5 secrets for success. <https://www.forbes.com/sites/marshallphelps/2016/01/25/5-secrets-to-innovation-success/#778ceac753ba>
- Radighieri, J., Mariadoss, B., Gregoire, Y., & Johnson, J. (2014). Ingredient branding and feedback effects: The impact of product outcomes, initial parent brand strength asymmetry, and parent brand role. *Marketing Letters*, 25(2), 123–138.
- Rana, J., & Paul, J. (2020). Health motive and the purchase of organic food: A meta-analytic review. *International Journal of Consumer Studies*, 44(2), 162–171. <https://doi.org/10.1111/ijcs.12556>
- Rao, A., Qu, L., & Ruekert, R. (1999). Signalling unobservable product quality through a brand ally. *Journal of Marketing Research*, 36(2), 258.
- Rao, A., & Ruekert, R. (1994). Brand alliances as signals of product quality. *Sloan Management Review*, 36(1), 87–97.
- Rodrigue, C. S., & Biswas, A. (2004). Brand alliance dependency and exclusivity: An empirical investigation. *Journal of Product and Brand Management*, 13(7), 477–487. <https://doi.org/10.1108/10610420410568417>
- Rosario, B. A., Sotgiu, F., De Valck, K., & Bijmolt, T. (2016). The effect of electronic word of mouth on sales: A meta-analytic review of platform, product, and metric factors. *Journal of Marketing Research*, 53(3), 297–318. <https://doi.org/10.1509/jmr.14.0380>
- Roschk, H., Loureiro, S., & Breitsohl, J. (2017). Calibrating 30 years of experimental research: A meta-analysis of the atmospheric effects of music, scent, and colour. *Journal of Retailing*, 93(2), 228–240.
- Rosenthal, R. (1979). The file drawer problem and tolerance for null results. *Psychological Bulletin*, 86(3), 638–641. <https://doi.org/10.1037/0033-2909.86.3.638>
- Roswinanto, W. (2015). Belief transfers in co-branding and brand extension and the roles of perceptual fit. Thesis, University of North Texas.
- Rothstein, H. R., Sutton, A. J., & Borenstein, M. (2005). *Publication bias in meta-analysis: Prevention, assessment and adjustments* (p. 2). John Wiley and Sons.
- Schmidt, J., & Bijmolt, T. H. A. (2020). Accurately measuring willingness to pay for consumer goods: A meta-analysis of the hypothetical bias. *Journal of the Academy of Marketing Science*, 48, 499–518. <https://doi.org/10.1007/s11747-019-00666-6>
- Senechal, S., Georges, L., & Pernin, J. (2014). Alliances between corporate and fair-trade brands: Examining the antecedents of overall evaluation of the co-branded product. *Journal of Business Ethics*, 124(3), 365–381. <https://doi.org/10.1007/s10551-013-1875-z>
- Shadish, W. R., Haddock, C. K. (2009). Combining estimates of effect sizes. In H. Cooper, L. V. Hedges, & J. C. Valentine (Eds.), *The handbook of research synthesis and meta-analysis* (pp. 257–277). The Russell Sage Foundation.
- Shim, S., & Gehrt, K. C. (1996). Hispanic and native American adolescents: An exploratory study of their approach to shopping. *Journal of Retailing*, 72, 307–324. [https://doi.org/10.1016/S0022-4359\(96\)90032-9](https://doi.org/10.1016/S0022-4359(96)90032-9)
- Shocker, A. (1995). Positive and negative effects of brand extensions and co-branding. *Advances in Consumer Research*, 22, 432–434.
- Simonin, B. L., & Ruth, J. A. (1998). Is a company known by the company it keeps? Assessing the spillover effects of brand alliances on consumer brand attitudes. *Journal of Marketing Research*, 35(1), 30–42. <https://doi.org/10.1177/002224379803500105>
- Singh, J. (2016). The influence of CSR and ethical self-identity in consumer evaluation of cobrands. *Journal of Business Ethics*, 138(2), 311–326. <https://doi.org/10.1007/s10551-015-2594-4>
- Singh, J., & Crisafulli, B. (2020). Corporate image at stake: The impact of crises and response strategies on consumer perceptions of corporate brand alliances. *Journal of Business Research*, 117, 839–849. <https://doi.org/10.1016/j.jbusres.2019.01.014>
- Singh, J., Kalafatis, S. P., & Ledden, L. (2014). Consumer perceptions of cobrands: The role of brand positioning strategies. *Marketing Intelligence and Planning*, 32(2), 145–159. <https://doi.org/10.1108/MIP-03-2013-0055>
- Singh, J., Quamina, L., & Kalafatis, S. (2016). Strategic brand alliances. Research advances and practical applications. In F. Riley, J. Singh, & C. Blankson (Eds.), *The routledge companion to contemporary brand management* (pp. 120–135). Routledge.
- Spence, M. (1973). Job market signalling. *The Quarterly Journal of Economics*, 87(3), 355–374.
- Teixeira, T. (2014). The rising cost of consumer attention: Why you should care, and what you can do about it. Working paper, Harvard Business School, Boston, 17 January.
- Verbeke, W., Dietz, B., & Verwaal, E. (2011). Drivers of sales performance: A contemporary meta-analysis. Have salespeople become knowledge brokers? *Journal of the Academy of Marketing Science*, 39(3), 407–428. <https://doi.org/10.1007/s11747-010-0211-8>
- Völkner, F., & Sattler, H. (2006). Drivers of brand extension success. *Journal of Marketing*, 70(2), 18–34. <https://doi.org/10.1509/jmkg.70.2.018>
- Wang, W., Chen, C. H. S., Nguyen, B., & Shukla, P. (2020). Collaboration between East and West: Influence of consumer dialectical self on attitude towards co-brand personality traits. *International Marketing Review*, 37(6), 1155–1180. <https://doi.org/10.1108/IMR-01-2019-0012>
- Yu, J., Song, Y., Lu, Y., & Qi, D. (2017). Study on co-branding strategy—Dongfeng Yueda Kia as example. In Global Congress on Manufacturing and Management Conference in Zhengzhou, China, pp. 1–7.
- Yu, Y., Rothenberg, L., & Moore, M. (2020). Exploring young consumer's decision-making for luxury co-branding combinations. *International Journal of Retail & Distribution Management*, 49(3), 341–358. <https://doi.org/10.1108/IJRDM-12-2019-0399>
- Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2006). *Services marketing*. McGraw Hill.
- Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (1985). Problems and strategies in services marketing. *Journal of Marketing*, 49(2), 33–46. <https://doi.org/10.1177/002224298504900203>

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APPENDIX A1

CODING MANUAL

#Source	Number of source
#Study	Number of study (multiples studies per source can occur)
#Effect size	Number of effect size (multiple effect sizes/variables may be used in a single study)
Author	First Author (et al.)
Title	Title
Publication title	Publication Title
Year	Year of Publication
Type of paper	Publication Type 1 = Journal; 2 = Conference Proceeding; 3 = Book; 4 = Dissertation; 5 = Working Paper
Type of branding strategy	0 = Horizontal; 1 = Vertical
IV name	Independent variable used in the study - Listed in file, Variable List
DV name	Dependent variable used in the study - Listed in file, Variable List
Brand	Fictitious or real brand used in study 0 = real brand; 1 = fictitious brand
Sample size	Number of respondents
Effect size	Effect size reported in the study correlation = 0/1; p-value direction: positive, negative; t-value direction: positive, negative; F-value direction: positive, negative
Student sample	Students used as respondents 0 = non-students; 1 = students
Method	Method used for data collection 1 = survey; 2 = experiment; 3 = Scanner Data (Household)
Industry-1	Industry of the first alliance partner used in the study 1 = IT; 2 = Food/Drink; 3 = Automotive; 4 = Tourism (airlines/hotels); 5 = Finance; 6 = Entertainment; 7 = Retailing; 8 = Household items; 9 = Consumer Electronics; 10 = Fashion; 11 = Cause related services; 12 = Print/journals; 13 = Higher education; 14 = CSR activity; 15 = Consultancy service; 16 = Cycling; 17 = Celebrity; 18 = Personal beauty; 19 = Clothing/sportswear; 21 = Luxury; 22 = Health care; 23 = Accessories (watch/jewellery); 24 = Social media; 25 = e-tailing services; 26 = Carrier service
Industry-2	Industry of the second alliance partner used in the study - same coding as Industry-1
B2C	Sector used in the study 0 = B2B; 1 = B2C
Service	Service Industry 0 = No; 1 = Yes

APPENDIX A2

VARIABLE LIST

Brand-specific variables in meta-analysis model	Variable name in the original study	Source
Brand equity	Brand attitude	Baumgarth (2004); Boo (2003); Garcia et al. (2017); James (2006); Helmig et al. (2007); Lafferty (1999); Lafferty et al. (2004); Mazodier and Merunka (2014); Rodrigue and Biswas (2004); Senechal et al. (2014); Simonin and Ruth (1998)
Brand equity	Prior attitudes towards brands	Rodrigue and Biswas (2004)
Brand equity	Perceived value	Bleijerveld et al. (2015)
Brand equity	Brand-specific attitude	Ahn et al. (2009)
Brand equity	Consumer-based brand equity	Arnett et al. (2010)

Continues

Continued

Brand-specific variables in meta-analysis model	Variable name in the original study	Source
Brand equity	Brand familiarity	Bouten et al. (2011); Lafferty et al. (2004); Naidoo and Hollebeek (2016)
Brand equity	Perceived quality towards original brand; positioning perception	James (2006); Singh et al. (2014)
Brand Equity	Brand trust	Ma et al. (2018); Naidoo and Hollebeek (2016)

APPENDIX A3

PUBLICATION BIAS TESTS

To minimise publication bias, several approaches were adopted at various stages of data collection and analysis. First, significant effort was invested in identifying and retrieving unpublished work (doctoral dissertations). Second, the funnel plot and Egger's test for detecting publication bias were performed. The studies are distributed symmetrically about the mean effect size in the funnel plot, revealing no evidence of publication bias. This result is also confirmed by Egger's test (insignificant *p* value), and Rosenthal's Fail-safe *N* test (1,217 studies with zero effect size required to nullify the existing effect), suggesting the absence of publication bias (Borenstein et al., 2009). Individual variable-based Fail-safe *N* results are presented in the relevant effect size tables in the main text.

TABLE A3. Egger's test

Egger's regression intercept	
Intercept	-0.88
Standard error	2.03
95% lower limit (2-tailed)	-4.93
95% upper limit (2-tailed)	3.16
t-value	0.44
df	68
<i>p</i> -value (1-tailed)	0.33
<i>p</i> -value (2-tailed)	0.66